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SEARCH REQUEST FORM

Scientific and Technical Information Center

	Examiner #: 76457 Date: 12402 -4635 Serial Number: 09/9124080 79 Results Format Preferred (circle): RAPER DISK E-MAIL
If mor than one search is submitted, please	prioritize searches in order of need. M ≥ 1
Include the elected species or structures, keywords, synony	describe as specifically as possible the subject matter to be searched. yms, acronyms, and registry numbers, and combine with the concept or special meaning. Give examples or relevant citations, authors, etc, if laims, and abstract.
Title of Invention: So ottochol	
Inventors (please provide full names):	ached
() () () () () () () () () ()	
Earliest Priority Filing Date: 7/13/00	
For Sequence Searches Only Please include all pertinent inf appropriate serial number.	formation (parent, child, divisional, or issued patent numbers) along with the
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) be(vater (2 w) oil) (3a) (Mucras & acopeo.co.
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	Jan Delaval
	Jan Delaval Reference Librarian Biotechnology & Chemical Library
	CM11E07 ~ 703-308-4498 jan.delaval@uspto.gov
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STAFF USE ONLY Type of Search	ch Vendors and cost where applicable
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Searcher Location: Structure (#)	Questel/Orbit
Date Searcher Picked Up: 2/1.102 Bibliographic	Dr.Link
Date Completed: 2 Litigation	Lexis/Nexis
Searcher Prep & Review Time: Fulltext	Sequence Systems
Cline Time: 17/1 Other	Other (medific)

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L2	2	S E4 jan.delaval@uspto.gov E AUBRUN O/AU
L3	2	S E4 E SONNEVILLE/AU
L4	8	S E6,E7,E4
L5		S E12 E SIMONNET J/AU
L6		S E3,E4,E8,E9 E L2724
L7		S E3 E L2721
L8 L9		S L()(2724 OR 2721) S ETHYLENE OR PROPYLENE OR BUTENE OR ISOBUTENE OR ISO BUTENE OR
		E HYDROCARBON/CT E E4+ALL
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L15		E 1-PENTENE/CN S E3
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L17		E 3-METHYL-1-BUTENE/CN S E3
		E 1-HEXENE/CN
L18		S E3 E 1-HEPTENE/CN
L19		S E3 E 1-OCTENE/CN
L20		S E3 E 1-DECENE/CN
L21		S.E3 E.1-UNDECENE/CN
L22	1	S E3 E 1-DODECENE/CN
L23	1	S E3 E 1-TRIDECENE/CN
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L26	1	E 1-PENTADECENE/CN S E3
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L28		E 1-HEPTADECENE/CN S E3
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L31
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L38
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L73
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L74
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L76
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L77
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L78
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L79
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L80
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L81
            226 S L72 AND ?DISPERS?
L82
            314 S L80, L81
L83
             32 S L82 AND (WATER OR H2O OR W) (L) (OIL OR OILY OR O OR O1 OR O2)
L84
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L85
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L86
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L87
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L99
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              7 S L98, L99
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L104
              1 S L1, L97
              1 S L104 AND L1-L10, L72-L104
L105
L106
              1 S L7-L10 AND L105
          16815 S HYDROCARBON OILS/CT
L107
            310 S L107 AND POLYOXYALKYLENES/CT
L108
            162 S L107 AND CARBOXYLIC ACIDS/CT
L109
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L117
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L118
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L119
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L121
L122
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L125
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             24 S L122 AND ?EMULS?
            122 S L122 AND ?DISPERS?
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L130
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L131
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     BIOTECHABS, BIOTECHDS, BIOTECHNO, BLLDB, CABA, CANCERLIT, CAPLUS, CBNB,
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                E L2721
                SEA E3,E26
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               1
               1
                   FILE EMBASE
                   FILE EUROPATFULL
               1
                   FILE GENBANK
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                   FILE PCTFULL
L132
                QUE (L2721/BI OR L2724/BI)
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FILE 'HCAPLUS, EMBASE, EUROPATFULL, PCTFULL' ENTERED AT 13:50:49 ON 06 FEB 2002

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L133
              9 S L132
L134
              3 S L133 AND COSMETIC#/TI
=> d bib ab kwic tot
L134 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2002 ACS
     2002:47507 HCAPLUS
AN
     Water-in-oil emulsion and its use especially in cosmetics
ΤI
     Aubrun-Sonneville, Odile; Simonnet, Jean-Thierry
ΙN
PA
     L'Oreal, Fr.
     Eur. Pat. Appl., 14 pp.
SO
     CODEN: EPXXDW
DΤ
     Patent
LA
     French
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
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                     ____
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                                          -----
     EP 1172089
                    · A1
                           20020116
                                          EP 2001-401616
                                                           20010619
PΙ
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
                                                           20010619
     WO 2002005780
                     A1
                           20020124
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            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
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            VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, BF, BJ, CF, CG,
            CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                            20000713
PRAI FR 2000-9223
                      Α
     A water-in-oil emulsion contains an oligomer or polymer deriv. of a
     polyolefin as an emulsifier. The emulsion is stable and is used in
     cosmetics for skin and nail care, cleansing and removing makeups, or skin
     makeup. A moisturizing cream contained L2724 2.5, isohexadecane
     3.29, hydrogenated polyisobutene 2.47, cyclomethicone 1.64, and
     preservative 0.1% in the oily phase; magnesium sulfate 0.9, preservative
     0.65, and water 88.45% in the aq. phase.
              THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 11
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     Water-in-oil emulsion and its use especially in cosmetics
TΙ
     A water-in-oil emulsion contains an oligomer or polymer deriv. of a
AB
     polyolefin as an emulsifier. The emulsion is stable and is used in
     cosmetics for skin and nail care, cleansing and removing makeups, or skin
     makeup. A moisturizing cream contained L2724 2.5, isohexadecane
     3.29, hydrogenated polyisobutene 2.47, cyclomethicone 1.64, and
     preservative 0.1% in the oily phase; magnesium sulfate 0.9, preservative
     0.65, and water 88.45% in the aq. phase.
                                             2002 WILA
L134
       ANSWER 2 OF 3 EUROPATFULL COPYRIGHT
PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET
       1172089 EUROPATFULL ED 20020125 EW 200203 FS OS
ΑN
TIEN
       Water-in-oil emulsion and its use especially in cosmetics.
       Wasser-in-Oel Emulsion und ihre Verwendung insbesondere in der Kosmetik.
TIDE
       Emulsion eau-dans-huile et ses utilisations notamment dans le domaine
TIFR
       cosmetique.
       Aubrun-Sonneville, Odile, 15 rue Pierre Vermeir, 92160 Antony, FR;
IN
       Simonnet, Jean-Thierry, 24 rue Leon Frot, 75011 Paris, FR
PΑ
       L'OREAL, 14, rue Royale, 75008 Paris, FR
PAN
       220280
       Rasson, Catherine, L'OREAL-DPI 6 rue Bertrand Sincholle, 92585 Clichy
ΑG
       Cedex, FR
AGN
       89081
       BEPA2002007 EP 1172089 A1 0014
OS
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SO

Wila-EPZ-2002-H03-T1b

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DT
       Patent
LA
       Anmeldung in Franzoesisch; Veroeffentlichung in Franzoesisch
       R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R GB; R GR; R IE;
DS
       R IT; R LI; R LU; R MC; R NL; R PT; R SE; R TR; R AL; R LT; R LV; R MK;
       R RO; R SI
PIT
       EPA1 EUROPAEISCHE PATENTANMELDUNG
ΡI
       EP 1172089
                            A1 20020116
                               20020116
OD
                               20010619
ΑI
       EP 2001-401616
PRAI
                               20000713
       FR 2000-9223
DETDFR.
        . . poids total de la phase huileuse. Par exemple, la polyolefine a
       terminaison succinique decrite ci-apres et commercialisee sous la
       denomination L2724 par la societe Lubrizol, a une
       concentration de 0,01% en poids par rapport au poids total de la phase
       huileuse,.
       Comme . . . terminaison succinique, on peut citer notamment les
       polyisobutylene a terminaison succinique modifiee, tels que les produits
       commercialises sous les denominations L2724 et L2721
       par la societe Lubrizol.
       On . . polyglycerol-3 (Arlacel 1690) dans l'exemple comparatif ne
       permet pas d'obtenir une dispersion stable homogene, alors que
       l'utilisation d'un emulsionnant polymere (L2724) dans
       l'exemple de l'invention permet d'obtenir une dispersion stable et
       homogene.
                  le systeme a l'Arlacel 1690 (exemple comparatif) presente
       Les . .
       une viscosite a basse contrainte, superieure a celle du systeme avec le
       L2724. Le systeme a l'Arlacel 1690 est agrege contrairement au
       systeme au L2724.
TIEN
       Water-in-oil emulsion and its use especially in cosmetics.
                         PCTFULL COPYRIGHT 2002 MicroPatent
      ANSWER 3 OF 3
L134
      2002005780 PCTFULL ED 20020206 EW 200204
ΑN
      WATER-IN-OIL EMULSION AND ITS USES IN PARTICULAR IN COSMETICS
TIEN
      EMULSION EAU-DANS-HUILE ET SES UTILISATIONS NOTAMMENT DANS LE DOMAINE
TIFR
      COSMETIQUE
      AUBRUN-SONNEVILLE, Odile; SIMONNET, Jean-Thierry
ΙN
PA
      L'OREAL
      RASSON, Catherine
ΑG
LA
      French
      French
LAF
      Patent
DТ
                           A1 20020124
PΤ
      WO 2002005780
      AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
DS
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      WO 2001-FR1917
                              20010619
AΙ
                              20000713
PRAIO FR 2000-00/09223
      The invention concerns a water-in-oil emulsion, comprising as emulsifier
ABEN
      physiologically acceptable medium, at least a polyolefin-derived oligomer
      polymer. The oligomer or polymer used is preferably a polyolefin with
      succinic
      termination optionally esterified or amidated, or a salt of such a
      polyolefin,
      and in particular polyisobutylene with esterified or amidated succinic
      termination. The resulting emulsion is stable, even in the presence of a
      significant proportion of aqueous phase, Furthermore, it is fresh on
      application. It can be used in particular for cosmetic, dermatological
      and
      pharmaceutical purposes, particularly for skin and /or nail care, for
      make-up
      removal and/or skin cleansing and/or for skin make-up.
ABFR La presente invention se rapporte a une emulsion eau-dans-huile,
```

comprenant comme emulsionnant dans un milieu physiologiquement acceptable, au moins oligomere ou polymere derive de polyolefine. L'oligomere ou le polymere utilise est de preference une polyolefine a terminaison succinique eventuellement esterifiee ou amidifiee, ou un sel d'une telle polyolefine, et en particulier du polyisobutylene a terminaison succinique esterifiee ou amidifiee. obtenue est stable, meme en presence d'une proportion importante de phase aqueuse. En outre, elle est fraiche a l'application. Elle peut etre notamment dans le domaine cosmetique, dermatologique et pharmaceutique, particulier pour le soin de la peau et/ou des ongles, pour le demaquillage et/ou le nettoyage de la peau, et/ou pour le maquillage de la peau. TIEN WATER-IN-OIL EMULSION AND ITS USES IN PARTICULAR IN COSMETICS poids total de la phase huileuse. Par exemple, la polyolefine a succinique decrite ci- apres et commercialisee sous la denomination **L2724** par la societe Lubrizol, a une concentration de 0,01% en poids par rapport au poids total de la phase huileuse, abaisse la. polyolefines a terminaison succinique, on peut citer notamment les polyisobutylene a terminaison succinique modifiee, tels que les produits commercialises sous les denominations L2724 et L2721 par la societe Lubrizol. io Un autre exemple de tensioactif polymerique utilisable dans l'invention est le produit de la reaction de l'anhydride. L2724 2,5 % Isohexadecane 3,29 % Polyisobutene hydrogene 2,47 % Cyclomethicone 1,64 % Conservateur 0,1 % Phase aqueuse: d'isostearate de polyglyceroi-3 (Arlacel 1690) dans l'exemple comparatif ne permet pas d'obtenir une dispersion stable homogene, alors que l'utilisation d'un emulsionnant polymere (**L2724**) dans l'exemple de l'invention permet d'obtenir une dispersion stable et homogene. observe que le systeme a l'Arlacel 1690 (exemple comparatif) presente une viscosite a basse contrainte, superieure a celle du systeme avec le L2724. Le systeme a l'Arlacel 1690 est agrege contrairement au lo systeme au L2724. EXEMPLE 2: LAIT HYDRATANT Phase huileuse L2721 2,21 % 1sohexadecane 7,87 % Cyclohexameth icone 3,93 % Polyisobutene hydrogene 5,9 % Conservateurs 0,09 0/0 Phase aqueuse Sulfate de magnesium 0,8. L2724 2,24 % Huile de noyaux d'abricot 10,24% lsododecane 6,63 % Conservateur

DETD

0,09 % Phase aqueuse:

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FILE COVERS 1907 - 1 Feb 2002 VOL 136 ISS 6 FILE LAST UPDATED: 30 Jan 2002 (20020130/ED)

L131 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.

=> d all hitstr 1131

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2002:47507 HCAPLUS
AN
     Water-in-oil emulsion and its use especially
TТ
     in cosmetics
     Aubrun-Sonneville, Odile; Simonnet, Jean-Thierry
IN
PΑ
     L'Oreal, Fr.
SO
     Eur. Pat. Appl., 14 pp.
     CODEN: EPXXDW
DT
     Patent
LA
     French
     ICM A61K007-48
IC
     62-4 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                              APPLICATION NO.
                                                                 DATE
                                            EP 2001-401616
     EP 1172089
                       A1 20020116
                                                                 20010619 <--
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     WO 2002005780
                       A1
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              LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
              RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI FR 2000-9223
                       Α
                              20000713 <--
     A water-in-oil emulsion contains an oligomer
```

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CN

CMF C4 H8

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or polymer deriv. of a polyolefin as an emulsifier. The
     emulsion is stable and is used in cosmetics for skin and
     nail care, cleansing and removing makeups, or skin makeup. A moisturizing
     cream contained L2724 2.5, isohexadecane 3.29, hydrogenated
     polyisobutene 2.47, cyclomethicone 1.64, and preservative 0.1% in the oily
     phase; magnesium sulfate 0.9, preservative 0.65, and water 88.45% in the
     aq. phase.
     cosmetic emulsion polyolefin emulsifier
     Cosmetics
        (cleansing; water-in-oil emulsion and its
        use esp. in cosmetics)
     Carboxylic acids
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (dicarboxylic; water-in-oil emulsion and
        its use esp. in cosmetics)
     Cosmetics
        (makeup removers; water-in-oil emulsion
        and its use esp. in cosmetics)
     Carboxylic acids
     Hydrocarbon oils
     Polyoxyalkylenes
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (water-in-oil emulsion and its use esp.
        in cosmetics)
     9003-27-4, Polyisobutene
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hydrogenated; water-in-oil emulsion and
        its use esp. in cosmetics)
     97-65-4D, Itaconic acid, reaction products with polyolefin derivs.
     108-31-6D, Maleic anhydride, reaction products with polyolefin
     derivs. 110-16-7D, Maleic acid, reaction products with
     polyolefin derivs. 110-17-8D, Fumaric acid, reaction products
     with polyolefin derivs. 498-23-7D, Citraconic acid, reaction
     products with polyolefin derivs. 498-24-8D, Mesaconic acid,
     reaction products with polyolefin derivs. 499-12-7D, Aconitic
     acid, reaction products with polyolefin derivs. 25322-68-3
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (water-in-oil emulsion and its use esp.
        in cosmetics)
              THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
        11
(1) Au van; US 5631389 A 1997 HCAPLUS
(2) Au van; US 5786468 A 1998 HCAPLUS
(3) Basf Aq; DE 19532419 A 1997 HCAPLUS
(4) Bobier-Rival, C; US 5652266 A 1997 HCAPLUS
(5) Eierdanz, H; US 5650158 A 1997 HCAPLUS
(6) Hoeffkes, H; US 4698065 A 1987 HCAPLUS
(7) Moeller, H; US 4705682 A 1987 HCAPLUS
(8) Oreal; EP 0709084 A 1996 HCAPLUS
(9) Selwitz, C; US 4369123 A 1983 HCAPLUS
(10) Tollens, F; US 5674511 A 1997 HCAPLUS
(11) Vermeer, R; US 5541341 A 1996 HCAPLUS
     9003-27-4, Polyisobutene
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hydrogenated; water-in-oil emulsion and
        its use esp. in cosmetics)
     9003-27-4 HCAPLUS
     1-Propene, 2-methyl-, homopolymer (9CI) (CA INDEX NAME)
     CM
          1 .
     CRN
         115-11-7
```

97-65-4D, Itaconic acid, reaction products with polyolefin derivs. ΙT 108-31-6D, Maleic anhydride, reaction products with polyolefin derivs. 110-16-7D, Maleic acid, reaction products with polyolefin derivs. 110-17-8D, Fumaric acid, reaction products with polyolefin derivs. 498-23-7D, Citraconic acid, reaction products with polyolefin derivs. 498-24-8D, Mesaconic acid, reaction products with polyolefin derivs. 499-12-7D, Aconitic acid, reaction products with polyolefin derivs. 25322-68-3 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (water-in-oil emulsion and its use esp.

in cosmetics)

RN 97-65-4 HCAPLUS

Butanedioic acid, methylene- (9CI) (CA INDEX NAME) CN

notryant asid

108-31-6 HCAPLUS RN 2,5-Furandione (9CI) (CA INDEX NAME) CN

110-16-7 HCAPLUS RN 2-Butenedioic acid (2Z)- (9CI) (CA INDEX NAME) CN

Double bond geometry as shown.

Maleic HO2C-CH=CH-CO2H

RN 110-17-8 HCAPLUS

2-Butenedioic acid (2E) - (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 498-23-7 HCAPLUS

2-Butenedioic acid, 2-methyl-, (2Z)- (9CI) (CA INDEX NAME) CN

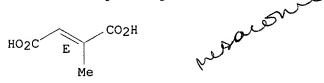
Double bond geometry as shown.

Joenie

RN 498-24-8 HCAPLUS

CN 2-Butenedioic acid, 2-methyl-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 499-12-7 HCAPLUS

CN 1-Propene-1,2,3-tricarboxylic acid (8CI, 9CI) (CA INDEX NAME)

RN 25322-68-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy- (9CI) (CA INDEX NAME)

=> d all hitstr tot

L148 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2002 ACS

AN 2000:526790 HCAPLUS

DN 133:139952

TI Transparent polymer gels

IN Misumi, Chinatsu

PA Kobayashi Pharmaceutical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08L023-26

ICS A61L009-04; C08L071-02

CC 62-5 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE
PI JP 2000212354 A2 20000802 JP 1999-12517 19990120

AB The gels, useful for perfumes and deodorants, contain isobutylene-maleic anhydride copolymer (I) alkali metal salts and crosslinked polyalkylene oxides as swelling gel bases, oily additives, surfactants, and H2O. A compn. contg. 2 or 3 wt.% rectangular blocks of crosslinked poly(ethylene oxide), 0.5-1.0 wt.% I Na salt beads, 2 wt.% KT 5676 (perfume), and surfactants showed good transparency.

ST isobutylene maleic anhydride copolymer polyoxyalkylene gel; perfume deodorant gel crosslinked polyalkylene oxide

IT Polyoxyalkylenes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

RL: BUU (Biological use, unclassified); BIOL (Biological Study); USE: (Uses)

(crosslinked; transparent perfume/deodorant gels contg. isobutylene-maleic anhydride copolymer alkali metal salts, crosslinked polyalkylene oxides, and surfactants)

IT Deodorants

Perfumes

Transparent materials

(gels; transparent perfume/deodorant gels contg. isobutylene-maleic anhydride copolymer alkali metal salts, crosslinked polyalkylene oxides, and surfactants)

IT Gels

Surfactants

(transparent perfume/deodorant gels contg. isobutylene-maleic anhydride copolymer alkali metal salts, crosslinked polyalkylene oxides, and surfactants)

IT 9003-11-6, Ethylene oxide-propylene oxide copolymer 25322-68-3,
 Poly(ethylene oxide) 25322-69-4, Poly(propylene oxide)
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(crosslinked; transparent perfume/deodorant gels contg. isobutylene-maleic anhydride copolymer alkali metal salts, crosslinked polyalkylene oxides, and surfactants)

IT 39612-00-5, Isobutylene-maleic anhydride copolymer sodium salt 286938-43-0, KT 5676

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(transparent perfume/deodorant gels contg. isobutylene-maleic anhydride copolymer alkali metal salts, crosslinked polyalkylene oxides, and surfactants)

IT 25322-68-3, Poly(ethylene oxide)

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(crosslinked; transparent perfume/deodorant gels contg. isobutylene-maleic anhydride copolymer alkali metal salts, crosslinked polyalkylene oxides, and surfactants)

RN 25322-68-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy- (9CI) (CA INDEX NAME)

$$HO \longrightarrow CH_2 - CH_2 - O \longrightarrow D$$

IT 39612-00-5, Isobutylene-maleic anhydride copolymer sodium salt
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(transparent perfume/deodorant gels contg. isobutylene-maleic anhydride copolymer alkali metal salts, crosslinked polyalkylene oxides, and surfactants)

RN 39612-00-5 HCAPLUS

CN 2,5-Furandione, polymer with 2-methyl-1-propene, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 26426-80-2

CMF (C4 H8 . C4 H2 O3) \times

CCI PMS

CM 2

CRN 115-11-7 CMF C4 H8

CRN 108-31-6 CMF C4 H2 O3

L148 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2002 ACS

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ΑN
     2000:275348 HCAPLUS
     132:298839
DN
     Preparations for the topical application of antiandrogens
ΤI
     Kraemer, Karl Theodor; Bohn, Manfred
IN
PA
     Aventis Pharma Deutschland G.m.b.H., Germany
SO
     Ger. Offen., 8 pp.
     CODEN: GWXXBX
DT
     Patent
LA
     German
     ICM A61K031-415
TC
     ICS A61K031-41; A61K031-42; A61K031-425
     63-6 (Pharmaceuticals)
     Section cross-reference(s): 62
FAN.CNT 2
                                                           DATE
                                           APPLICATION NO.
     PATENT NO.
                      KIND
                           DATE
                           _____
                                           -----
     ______
                                           DE 1998-19848856 19981023
     DE 19848856
                      Α1
                            20000427
PΙ
                                                          19991012
                                          WO 1999-EP7660
     WO 2000024366
                     A1
                            20000504
            AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
            CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
            MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
            SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
            CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1123082
                           20010816
                                         EP 1999-953787
                                                           19991012
                      Α1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
PRAI DE 1998-19848856 A
                           19981023
     DE 1999-19900749 A
                           19990112
     WO-1999-EP7660
                      W
                           19991012
     MARPAT 132:298839
OS
GΙ
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$$R1$$
 R^2
 R^3
 R^3
 R^3

AB A prepn. contg. .gtoreq.1 physiol. compatible film former, .gtoreq.1 physiol. compatible solvent, .gtoreq.1 plasticizer, and a topical N-heterocyclylphenyl antiandrogen [I; R1 = CN, NO2, halo, carboxyalkyl; R2 = CF3, halo, CN; R3 = O. S, NH; X = C(O), C(S); Y = NR4, CR5C6; or XY = C(SR4):N; R4 = H, (substituted) C1-6 alkyl, C2-6 alkenyl; R5, R6 = H, (substituted) C1-4 alkyl; Z = O, CMe2] is suitable for the treatment of

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androgenic alopecia, hirsutism, seborrhea, and acne and can be used in
           A suitable compn. contained 4-[3-(4-hydroxybutyl)-4,4-
dimethyl-2,5-dioxo-1-imidazolidinyl]-2-(trifluoromethyl)benzonitrile 5.0,
Luviquat FC 500 (vinylimidazolium methochloride/vinylpyrrolidone
copolymer) 2.5, Cremophor RH 410 2.5, 96% EtOH 63.0, and demineralized H2O
27.0 wt.%.
alopecia treatment topical antiandrogen; hirsutism treatment topical
antiandrogen; hair growth heterocyclylphenyl antiandrogen
Carbohydrates, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
   (allyl ethers, polymers with polyacrylic acid, film-forming agents;
  prepns. for topical application of antiandrogens)
   (androgenic, treatment of; prepns. for topical application of
   antiandrogens)
Androgens
RL: BAC (Biological activity or effector, except adverse); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
   (antiandrogens; prepns. for topical application of antiandrogens)
Drug delivery systems
   (delayed release; prepns. for topical application of antiandrogens)
Polyoxyalkylenes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
   (derivs., plasticizers; prepns. for topical application of
   antiandrogens)
Castor oil
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
   (ethoxylated, plasticizer; prepns. for topical application of
   antiandrogens)
Collagens, biological studies
Gelatins, biological studies
Polysiloxanes, biological studies
Protein hydrolyzates
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
   (film-forming agents; prepns. for topical application of antiandrogens)
Polymers, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
   (film-forming; prepns. for topical application of antiandrogens)
Castor oil
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (hydrogenated, ethoxylated, plasticizer; prepns. for topical
   application of antiandrogens)
Caseins, biological studies
Elastins
Keratins
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
   (hydrolyzates, film-forming agents; prepns. for topical application of
   antiandrogens)
Polysiloxanes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
   (polyether-, film-forming agents; prepns. for topical application of
   antiandrogens)
Cosmetics
Vasodilators
   (prepns. for topical application of antiandrogens)
Oat
Silk
Wheat
```

(proteins, hydrolyzates, film-forming agents; prepns. for topical

```
application of antiandrogens)
ΙT
     Polyethers, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
    · (Uses)
        (siloxane-, film-forming agents; prepns. for topical application of
        antiandrogens)
IT
     Proteins, specific or class
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (soybean, hydrolyzates, film-forming agents; prepns. for topical
        application of antiandrogens)
ΙT
     Drug delivery systems
        (topical; prepns. for topical application of antiandrogens)
IT
     Hirsutism
     Seborrhea
        (treatment of; prepns. for topical application of antiandrogens)
                          108-18-9, Diisopropylamine
                                                       364-98-7, Diazoxide
IT
     52-53-9, Verapamil
                                                        1841-19-6, Fluspirilene
                              484-23-1, Dihydralazine
     456-59-7, Cyclandelate
                                                       13042-18-7, Fendiline
                           6493-05-6, Pentoxifylline
     2062-78-4, Pimozide
                              21829-25-4, Nifedipine
                                                       22916-47-8, Miconazole
     16662-47-8, Gallopamil
                               39562-70-4, Nitrendipine
                                                           42399-41-7, Diltiazem
     27848-84-6, Nicergoline
                                                              55985-32-5,
     52468-60-7, Flunarizine
                               55242-55-2, Propentofylline
                                           63675-72-9, Nisoldipine
                   62571-86-2, Captopril
     Nicardipine
                                                       75530-68-6, Nilvadipine
                              72509-76-3, Felodipine
     66085-59-4, Nimodipine
                              76547-98-3, Lisinopril
                                                       85441-61-8, Quinapril
     75695-93-1, Isradipine
                              87333-19-5, Ramipril
                                                     87679-37-6, Trandolapril
     86541-75-5, Benazepril
                                                       98048-97-6, Fosinopril
     88150-42-9, Amlodipine
                              88768-40-5, Cilazapril
                                                            149543-07-7,
     105102-21-4, Torbafylline
                                 114432-13-2, Fantofarone
     Diperdipine
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (blood flow stimulant; prepns. for topical application of
        antiandrogens)
IT
     30049-31-1
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (crosslinked, film-forming agent; prepns. for topical application of
        antiandrogens)
                                                    9000-65-1, Gum tragacanth
                              9000-30-0, Guar gum
     9000-07-1, Carrageenan
IT
     9003-06-9, Acrylic acid/acrylamide copolymer
                                                    9003-39-8, PVP
                                                                      9004-34-6.
                                     9004-61-9, Hyaluronic acid
                                                                   9005-32-7,
     Cellulose, biological studies
                    9011-16-9, Methyl vinyl ether/maleic anhydride copolymer
     Alginic acid
                           9016-00-6D, Dimethylsiloxane, phosphopanthenoate
     9012-76-4, Chitosan
                                        24937-78-8, Ethylene/vinyl acetate
              11138-66-2, Xanthan gum
                                                        31900-57-9D,
                              26124-25-4
                                           28211-18-9
                 25086-89-9
     copolymer
                                 32440-50-9
                                              65829-78-9
                                                            76404-21-2
     phosphopanthenoate deriv.
                                             138537-26-5
                               104452-09-7
                  96806-20-1
     92183-41-0
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (film-forming agent; prepns. for topical application of antiandrogens)
     74-85-1D, Ethylene, polymers with acrylic esters
                                                       79-10-7D,
IT
                                     79-41-4D, Methacrylic acid, polymers
     Acrylic acid, esters, polymers
     110-16-7D, Maleic acid, monoalkyl esters, polymers with Me vinyl
                                             9004-34-6D, Cellulose, derivs.
             9000-30-0D, Guar gum, derivs.
                                     10124-68-2D, N-Octylacrylamide, polymers
     9012-76-4D, Chitosan, derivs.
     with butylaminoethylmethacrylic acid and acrylic esters
                                                                24171-27-5D,
     2-Butylaminoethyl methacrylate, polymers with acrylic esters and
                       30581-59-0D, quaternized
                                                  117748-71-7
     octylacrylamide
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (film-forming agents; prepns. for topical application of antiandrogens)
TΤ
                          27321-96-6
     81-13-0, Panthenol
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (plasticizer; prepns. for topical application of antiandrogens)
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IT 54578-91-5, Gantrez Es-425 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (plasticizer; prepns. for topical application of antiandrogens) 124-04-9D, Adipic acid, esters TΤ 111-20-6D, Sebacic acid, esters 25322-68-3D, PEG, derivs. RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (plasticizers; prepns. for topical application of antiandrogens) 154992-24-2 203054-83-5, 4-(5-Methyl-2,4-dioxo-5-IT trifluoromethyl)oxazolidin-3-yl-2-(trifluoromethyl)benzonitrile RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (prepns. for topical application of antiandrogens) IT 74-85-1D, Ethylene, polymers with acrylic esters 110-16-7D , Maleic acid, monoalkyl esters, polymers with Me vinyl ether RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (film-forming agents; prepns. for topical application of antiandrogens) RN 74-85-1 HCAPLUS CN Ethene (9CI) (CA INDEX NAME) $H_2C = CH_2$ 110-16-7 HCAPLUS RN 2-Butenedioic acid (2Z)- (9CI) (CA INDEX NAME) CN Double bond geometry as shown. IT 25322-68-3D, PEG, derivs. RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (plasticizers; prepns. for topical application of antiandrogens) RN 25322-68-3 HCAPLUS Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy- (9CI) (CA INDEX CN СН2-СН2-О-L148 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2002 ACS ΑN 1996:756236 HCAPLUS DN 126:22788 TΙ Gel deodorant compositions based on a soap gelling agent Trandai, Angie; Jevtitch, Milan Marcel; Phan, Dean Van; Warner, Paulette INLiburd Procter and Gamble Company, USA PA SO PCT Int. Appl., 30 pp. CODEN: PIXXD2 DT Patent LA English

APPLICATION NO.

DATE

IC

CC

FAN.CNT 1

ICM A61K007-32

PATENT NO.

62-4 (Essential Oils and Cosmetics)

KIND DATE

```
ΡI
     WO 9632091
                      Α2
                            19961017
                                           WO 1996-US4969
                                                            19960411
         W: CZ, HU
         RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                       Α
                            19961217
                                           US 1995-421644 19950413
                            19980128
                                           EP 1996-912670
                                                           19960411
     EP 820271
                       Α1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
PRAI US 1995-421644
                            19950413
     WO 1996-US4969
                            19960411
     The present invention relates to a gel deodorant compn. comprising: (a)
AB
     0.001-50 wt.% of deodorant active compd., fragrance, or combination
     thereof; (b) 0.01-15 wt.% of a soap gelling agent selected from the group
     consisting of salts of C12-40 fatty acids, and combinations thereof; (c)
     3-50 wt.% of glycerol, a polymer of glycerol, wherein said polymer has av.
     mol. wt. of .ltoreq. 800, or combinations thereof; (d) 5-70 wt.% of one or
     more low mol. wt. polyoxyethylene compds. having a structure
     R-(-OCH2CH2-)n-OR1; n = 2-8; R, R1 = H, alkyl, C(0)R2; R2 = H, alkyl; and
     (e) 8-75 wt.% of water; wherein said compn. contains no more than about 15
     wt.% propylene glycol. Triclosan is used as a deodorant active
     ingredient. 2,4,4'-trichloro-2'-hydroxy-diphenyl ether.
     deodorant gel soap gelling agent; triclosan deodorant gel gelling agent
ST
     Fatty acids, biological studies
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (C12-40, salts; gel deodorant compns. based on soap gelling agents)
IT
     Gelation agents
     Odor
     Perfumes
        (gel deodorant compns. based on soap gelling agents)
IT
     Polyoxyalkylenes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (gel deodorant compns. based on soap gelling agents)
IT
     56-81-5, 1,2,3-Propanetriol, biological studies 56-81-5D,
                                   822-16-2, Sodium stearate
                                                                 3380-34-5,
     1,2,3-Propanetriol, polymers
     2,4,4'-Trichloro-2'-hydroxy-diphenyl ether 9004-99-3, Unipeg 200MS
     9007-20-9, Carbomer 25265-71-8, Dipropylene glycol 25322-68-3
     25618-55-7, Polyglycerol 25791-96-2, Glycerol polyether with propylene
     oxide 26426-80-2, Fibersorb SA 7200H
                                            74790-85-5
                                                         184436-35-9,
     Aqualic L 74
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (gel deodorant compns. based on soap gelling agents)
     25322-68-3 26426-80-2, Fibersorb SA 7200H
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (gel deodorant compns. based on soap gelling agents)
RN
     25322-68-3 HCAPLUS
     Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy- (9CI) (CA INDEX
CN
     NAME)
HO \longrightarrow CH_2 - CH_2 - O \longrightarrow n
    26426-80-2 HCAPLUS
RN .
     2,5-Furandione, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME)
CN
     CM
          1
```

CRN

CMF

115-11-7

C4 H8

108-31-6 CRN CMF C4 H2 O3

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L148 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2002 ACS
```

1996:464554 HCAPLUS AN

DN 125:123264

ΤI Shelf-stable skin cleansing liquid with gel-forming polymer, lipid, and crystalline ethylene glycol fatty acid ester

Kacher, Mark Leslie; Dixon, Thomas Jefferson; Koczwara, Constance Sagel; IN Tollens, Fernando Ray; Schmidt, Robert Raymond; Evans, Marcus Wayne; Geary, Nicholas William

PA Procter and Gamble Co., USA

SO PCT Int. Appl., 27 pp. CODEN: PIXXD2

DT Patent

English LA

IC ICM A61K007-50

CC 62-4 (Essential Oils and Cosmetics)

FAN.	CNT	1									*						
	PATENT NO.			KIND DATE			APPLICATION NO.			DATE							
ΡI	WO	9617592		A2		19960613		WO 1995-US15674			19951201						
		W: BR,	CA,	CN,	JP,	MX											
		RW: AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE
	CA	2207031		A	A	1996	0613		CA	199	5-22	20703	31	1995	1201		
	ΕP	796084		Α	2	1997	0924		EP	199	95-94	42536	6	1995	1201		
	ΕP	796084		В	1	1999	990506										
		R: AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙE,	ΙΤ,	LI,	LU,	NL,	PT,	SE
	BR	9509865		Α		1997	0930		BR	199	5-98	365		1995	1201		
	CN	1169112		Α		1997	1231		CN	199	5-19	96673	3	1995	1201		
	ΑT	179595		E		1999	0515		AT	199	5-94	42536	6	1995	1201		
	JΡ	11507323		T	2	1999	0629		JP	199	5-5	17676	6	1995	1201		
	US	5674511		Α		1997	1007		US	199	6-72	22699	9	19960	0930		
PRAI	US	1994-350	368			1994	1206										
	WO	1995-US1	5674			1995	1201										

The title cleansing liq. can provide good cleansing, lather, and good AB sensory feel and yet provides a lipid-moisturizing benefit via deposition of the lipid on the skin of the user. The liq. compn. is stable and on a macro scale is homogeneous. The dual cleansing and lipid-moisturizing lig. compn. comprises: (1) 5-30 parts lipid skin-moisturizing agent; (2) 1-15 parts ethylene glycol fatty acid ester as stabilizer; (3) 0.05-3 parts water-dispersible gel-forming polymer; (4) 5-30 parts lathering synthetic surfactant; and (5) water. The synthetic surfactant and any soap has a combined crit. micelle concn. equil. surface tension value of 15-50, and the lathering skin cleansing liq. compn. has a lipid deposition value (LDV) of 5-1000 .mu.g lipid/cm2 of skin. Thus, ethylene glycol distearate (EGDS) was added to a mixt. of various surfactant types in water at 71.degree. to maximize solubilization of EGDS, and quickly cooled to 27-43.degree. to induce crystn. of EGDS. A cleanser contained K myristate 6.0, myristic acid 0.3, Na Cl2-14 alkyl glyceryl ether sulfonate

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5.8, triethanolamine lauroyl sarcosinate 2.7, coco betaine 3.8, EGDS 4.2,
Polyquaternium 10 0.25, petrolatum 13.6, mineral oil 3.4, glycerin 8.6,
perfume 0.8, tetra-Na EDTA 0.15, DMDM hydantoin (preservative) 0.4, and
H2O 49.9 parts.
ethylene glycol fatty ester stabilizer cleanser
Polymers, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
   (gel-forming, water-dispersible; shelf-stable skin cleansing lig. with
   gel-forming polymer, lipid, and cryst. ethylene glycol fatty acid
   ester)
Glycosides
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
   (poly-, alkyl; shelf-stable skin cleansing liq. with gel-forming
   polymer, lipid, and cryst. ethylene glycol fatty acid ester)
Beeswax
Surfactants
   (shelf-stable skin cleansing liq. with gel-forming polymer, lipid, and
   cryst. ethylene glycol fatty acid ester)
Betaines
Esters, biological studies
Glycerides, biological studies
Lanolin
Lipids, biological studies
Paraffin oils
Paraffin waxes and Hydrocarbon waxes, biological studies
Phospholipids, biological studies
Siloxanes and Silicones, biological studies
Waxes and Waxy substances
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
   (shelf-stable skin cleansing liq. with gel-forming polymer, lipid, and
   cryst. ethylene glycol fatty acid ester)
Amines, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
   (N-oxides, shelf-stable skin cleansing liq. with gel-forming polymer,
   lipid, and cryst. ethylene glycol fatty acid ester)
Phenols, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
   (alkyl, ethoxylated, shelf-stable skin cleansing liq. with gel-forming
  polymer, lipid, and cryst. ethylene glycol fatty acid ester)
Polysaccharides, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
   (cationic, shelf-stable skin cleansing liq. with gel-forming polymer,
   lipid, and cryst. ethylene glycol fatty acid ester)
   (cleansing, shelf-stable skin cleansing liq. with gel-forming polymer,
   lipid, and cryst. ethylene glycol fatty acid ester)
Glycerides
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
   (di-, shelf-stable skin cleansing liq. with gel-forming polymer, lipid,
   and cryst. ethylene glycol fatty acid ester)
Polyoxyalkylenes, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
   (esters, shelf-stable skin cleansing liq. with gel-forming polymer,
   lipid, and cryst. ethylene glycol fatty acid ester)
Sulfonic acids, biological studies
```

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

```
(Uses)
        (esters, with alkyl glyceryl ethers; shelf-stable skin cleansing liq.
        with gel-forming polymer, lipid, and cryst. ethylene glycol fatty acid
        ester)
IT
     Fatty acids
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (esters, with polyols; shelf-stable skin cleansing liq. with
        gel-forming polymer, lipid, and cryst. ethylene glycol fatty acid
IT
     Amides
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (fatty, shelf-stable skin cleansing liq. with gel-forming polymer,
        lipid, and cryst. ethylene glycol fatty acid ester)
TΤ
     Steroids, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (hydroxy, shelf-stable skin cleansing liq. with gel-forming polymer,
        lipid, and cryst. ethylene glycol fatty acid ester)
IT
     Quaternary ammonium compounds, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (polymers, shelf-stable skin cleansing liq. with gel-forming polymer,
        lipid, and cryst. ethylene glycol fatty acid ester)
TT
     Fatty acids, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (sulfo, alkyl esters, shelf-stable skin cleansing liq. with gel-forming
        polymer, lipid, and cryst. ethylene glycol fatty acid ester)
IT
     Betaines
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (sulfo-, shelf-stable skin cleansing liq. with gel-forming polymer,
        lipid, and cryst. ethylene glycol fatty acid ester)
IT
     9004-34-6, Cellulose, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (resins; shelf-stable skin cleansing liq. with gel-forming polymer,
        lipid, and cryst. ethylene glycol fatty acid ester)
                                            50-99-7D, Glucose, esters, alkyl
IT
     50-21-5D, Lactic acid, O-acyl esters
               56-86-0D, Glutamic acid, N-acyl derivs.
                                                         79-10-7D, 2-Propenoic
                      79-41-4D, polymers 107-21-1D, 1,2-Ethanediol, esters
     acid, polymers
     107-36-8D, Isethionic acid, esters
                                          107-97-1D, Sarcosine, N-acyl, esters
     151-21-3, Sodium lauryl sulfate, biological studies
                                                           2235-54-3, Ammonium
                      3416-24-8D, Glucosamine, N-acyl, alkyl derivs.
     lauryl sulfate
                                                   7631-98-3, Sodium lauryl
     5138-18-1D, Sulfosuccinic acid, alkyl esters
                   7664-38-2D, Phosphoric acid, alkyl esters
                                                               7664-93-9D,
     Sulfuric acid, esters with .alpha.-olefins and polyoxyalkylenes
                           9003-04-7, Sodium polyacrylate
                                                            9003-29-6
     9000-30-0, Guar gum
                                9004-62-0, Hydroxyethylcellulose
                                                                   9004-82-4,
     9003-29-6D, hydrogenated
                                                       12441-09-7D, Sorbitan,
     Sodium laureth sulfate
                              9006-65-9, Dimethicone
                                                16693-53-1, Triethanolamine
              13429-27-1, Potassium myristate
                                     25426-60-2 26426-80-2
     lauroyl sarcosinate 25322-68-3
      Isobutylene/maleic anhydride copolymer
                                                26590-05-6, Polyquaternium 7
     32612-48-9, Ammonium laureth sulfate 37961-36-7, Sodium lauryl
                                                                     80455-45-4
                   52619-75-7D, Taurine methyl ester, acyl derivs.
     81859-24-7, Polyquaternium 10 106392-12-5, Poloxamer
                                                              110617-70-4,
                179266-74-1
     Tetronic
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (shelf-stable skin cleansing liq. with gel-forming polymer, lipid, and
        cryst. ethylene glycol fatty acid ester)
IT
     627-83-8, Ethylene glycol distearate
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
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berman - 09 / 903606 (Uses) (stabilizer; shelf-stable skin cleansing liq. with gel-forming polymer, lipid, and cryst. ethylene glycol fatty acid ester) ΙT 25322-68-3 26426-80-2, Isobutylene/maleic anhydride copolymer RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (shelf-stable skin cleansing liq. with gel-forming polymer, lipid, and cryst. ethylene glycol fatty acid ester) RN25322-68-3 HCAPLUS CN Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy- (9CI) (CA INDEX NAME) 26426-80-2 HCAPLUS RN CN 2,5-Furandione, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME) CM 1 CRN 115-11-7 CMF C4 H8 CH₂ H3C-C-CH3 CM 2 CRN 108-31-6 CMF C4 H2 O3 => d his (FILE 'HOME' ENTERED AT 12:32:58 ON 06 FEB 2002) SET COST OFF FILE 'HCAPLUS' ENTERED AT 12:33:12 ON 06 FEB 2002 E FR2000-9223/AP, PRN L1 1 S E4

E AUBRUN SONNEVILLE O/AU L2 2 S E4 E AUBRUN O/AU L3 2 S E4 E SONNEVILLE/AU L48 S E6, E7, E4 L5 9 S E12 E SIMONNET J/AU 43 S E3, E4, E8, E9 L6 E L2724 L7 1 S E3

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E L2721
              0 S L()(2724 OR 2721)
L8
         531316 S ETHYLENE OR PROPYLENE OR BUTENE OR ISOBUTENE OR ISO BUTENE OR
L9
                E HYDROCARBON/CT
                E E4+ALL
           1189 S E3
L10
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L11
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L12
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                E 1-BUTENE/CN
L13
              1 S E3
                E ISOBUTENE/CN
L14
              1 S E3
                E 1-PENTENE/CN
L15
              1 S E3
                E 2-METHYL-1-BUTENE/CN
L16
              1 S E3
                E 3-METHYL-1-BUTENE/CN
L17
              1 S E3
                E 1-HEXENE/CN
L18
              1 S E3
                E 1-HEPTENE/CN
L19
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                E 1-OCTENE/CN
L20
              1 S E3
                E 1-DECENE/CN
L21
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                E 1-UNDECENE/CN
L22
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L23
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L24
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L25
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                E 1-PENTADECENE/CN
L26
              1 S E3
                E 1-HEXADECENE/CN
L27
              1 S E3
                E 1-HEPTADECENE/CN
L28
              1 S E3
                E 1-OCTADECENE/CN
L29
              1 S E3
L30
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                SEL RN
L31
          19107 S E1-E19/CRN
                SEL MF L30
          16223 S L31 AND (C15H30 OR C17H34 OR C13H26 OR C14H28 OR C10H20 OR C1
L32
L33
            116 S L32 AND 1/NC
L34
             40 S L33 AND HOMOPOLYMER
L35
          19067 S L31 NOT L34
              7 S 108-31-6 OR 110-16-7 OR 110-17-8 OR 97-65-4 OR 498-23-7 OR 49
L36
L37
              4 S C5H6O4/MF AND 2 BUTENEDIOIC ACID AND 2 METHYL
L38
              3 S L37 NOT 13C#
              7 S C4H4O4/MF AND 2 BUTENEDIOIC ACID
L39
L40
              3 S L39 NOT (ION OR D/ELS)
L41
              9 S L36, L38, L40
                SEL RN
L42
          82585 S E36-E44/CRN
L43
           2505 S L42 AND L31
L44
            100 S L43 AND 2/NC
L45
             84 S L44 NOT (GRS OR MAN)/CI
              5 S L45 AND (ACETIC OR C9H14O5 OR C23H42O4 OR C6H14O3 OR PROPANED
L46
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79 S L45 NOT L46
L48
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L49
L50
              1 S 108-31-6
L51
          20645 S 108-31-6/CRN
            356 S L49 AND L51
L52
            35.6 S L52 AND C4H2O3 AND C4H8
L53
L54
               5 S L53 AND 2/NC
L55
            123 S L53 AND ((LI OR NA OR K OR MG OR CA OR MN OR ZN OR F OR CL OR
L56
             12 S L55 AND 3/NC
L57
             10 S L56 NOT (C4H5CL OR C8H7CLN2)
L58
             76 S L55 AND 4/NC
L59
             47 S L58 AND NA/ELS
              4 S L59 AND (FE OR AL OR CA OR MG)/ELS
L60
              5 S L59 AND (FE OR AL OR CA OR MG OR ZN)/ELS
L61
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L62
L63
              1 S L62 AND MG/ELS
              1 S L58 AND NC2/ES
L64
L65
             22 S L54, L57, L60, L61, L63, L64
             35 S L55 NOT L56-L65
L66
              2 S L66 AND (CA AND NA)/ELS
L67
              1 S L67 AND NC2/ES
L68
L69
             23 S L65, L68
L70
             59 S L30, L34
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                 E L 2724/CN
                 E L-2724/CN
L71
              1 S 25322-68-3
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L72
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L73
         243549 S L70
L74
          39455 S L41
L75
            745 S L73 AND L47
L76
           5681 S L72-L75 AND ?EMULS?
L77
          15678 S L72-L75 AND ?DISPERS?
L78
            221 S L75, L77 AND (WATER OR H2O OR W) (1A) (OIL OR O OR OILY)
L79.
             21 S L78 AND COSMETIC#/SC, SX, CW
L80
            115 S L72 AND ?EMULS?
L81
            226 S L72 AND ?DISPERS?
            314 S L80, L81
L82
L83
             32 S L82 AND (WATER OR H2O OR W) (L) (OIL OR OILY OR O OR O1 OR O2)
L84
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L85
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L86
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L87
             11 S L86 NOT (SOAP OR DEODORANT OR HAIR)
L88
              O S L72 AND COSMETICS+NT/CT NOT L83-L87
L89
              O S L72 AND COSMETIC NOT L83-L87
L90
           4388 S L73 AND L41
L91
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L92
            135 S L90 AND ?EMULS?
L93
            482 S L90 AND ?DISPERS?
L94
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L98
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L99
              6 S L92, L93 AND COSMETICS+NT/CT
L100
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L101
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L102
L103
              4 S L102 AND (1 OR 62 OR 63)/SC,SX
L104
              1 S L1, L97
              1 S L104 AND L1-L10, L72-L104
L105
              1 S L7-L10 AND L105
L106
L107
          16815 S HYDROCARBON OILS/CT
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L108
            310 S L107 AND POLYOXYALKYLENES/CT
L109
            162 S L107 AND CARBOXYLIC ACIDS/CT
L110
              O S L107 AND DICARBOXYLIC ACIDS/CT
            453 S L108-L109
L111
            109 S L111 AND ?EMULS?
L112
L113
             57 S L111 AND ?DISPERS?
             44 S L112, L113 AND (H2O OR H OR WATER) (2A) (OIL OR OILY OR O OR O1
L114
             11 S L114 AND COSMETIC#/SC, SX, CW, BI
L115
             64 S L111 AND (COSMETICS+NT/CT OR COSMETIC#/SC, SX, CW, BI)
L116
             53 S L116 NOT L115
L117
L118
              9 S L117 AND ?EMULS?
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L119
              7 S C4H8 AND L70
L120
              3 S PROPENE AND L119
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L121
          20336 S L120
L122
            462 S L41 AND L121
             27 S L122 AND L71
L123
              5 S L123 AND (1 OR 62 OR 63)/SC, SX
L124
L125
              1 S L123 AND COSMETIC#
L126
              1 S L123 AND COSMETICS+NT/CT
              5 S L124-L126
L127
             24 S L122 AND ?EMULS?
L128
            122 S L122 AND ?DISPERS?
L129
L130
              1 S L128, L129 AND (COSMETIC#/SC, SX, CW, BI AND COSMETICS+NT/CT)
L131
              1 S L106, L130
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     BIOTECHABS, BIOTECHDS, BIOTECHNO, BLLDB, CABA, CANCERLIT, CAPLUS, CBNB,
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     2002
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                SEA E3, E26
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               1
               1
                   FILE EMBASE
               1
                   FILE EUROPATFULL
               4
                   FILE GENBANK
                   FILE PCTFULL
                QUE (L2721/BI OR L2724/BI)
L132
     FILE 'HCAPLUS, EMBASE, EUROPATFULL, PCTFULL' ENTERED AT 13:50:49 ON 06
     FEB 2002
L133
              9 S L132
L134
              3 S L133 AND COSMETIC#/TI
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                E EP1172089/PN
                E FR2000-9223/AP, PRN
     FILE 'WPIX' ENTERED AT 13:53:31 ON 06 FEB 2002
                E FR2000-9223/AP, PRN
                E EP1172089/PN
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     FILE 'HCAPLUS' ENTERED AT 13:54:03 ON 06 FEB 2002
     FILE 'REGISTRY' ENTERED AT 13:54:26 ON 06 FEB 2002
L135
             23 S L65, L68
L136
              2 S L135 AND NC2/ES
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L137

1 S 151-56-4

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L138
           1388 S 151-56-4/CRN
                E (C2H4N)/MF
                E (C2H5N)/MF
L139
              1 S E8
L140
              8 S L138 AND C2H5N AND 1/NC
              4 S L140 AND HOMOPOLYMER
L141
     FILE 'HCAPLUS' ENTERED AT 13:58:04 ON 06 FEB 2002
L142
           1239 S L135
L143
           4388 S L70 AND L41
L144
            241 S L142, L143 AND L71, L137, L141
L145
              3 S L144 AND COSMETIC
              5 S L144 AND COSMETIC#/SC, SX
L146
              5 S L145, L146
L147
L148
              4 S L147 NOT L131
L149
             52 S L144 AND (?EMULS? OR ?DISPERS?) NOT L131, L147
L150
              6 S L149 AND (STABILIZ? OR DERMAL OR DENTAL OR POWDER)/TI
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STRUCTURE FILE UPDATES: 4 FEB 2002 HIGHEST RN 389569-32-8 DICTIONARY FILE UPDATES: 4 FEB 2002 HIGHEST RN 389569-32-8

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the H/Z/CA/CAplus files between 12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches during this period, either directly appended to a CAS Registry Number or by qualifying an L-number with /P, may have yielded incomplete results. As of 1/23/02, the situation has been resolved. Also, note that searches conducted using the PREP role indicator were not affected.

Customers running searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator between 12/27/01 and 1/23/02, are encouraged to re-run these strategies. Contact the CAS Help Desk at 1-800-848-6533 in North America or 1-614-447-3698, worldwide, or send an e-mail to help@cas.org for further assistance or to receive a credit for any duplicate searches.

=> d sca 1135

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 2,5-Furandione, polymer with 2-methyl-1-propene, alternating, sodium salt (9CI)
MF (C4 H8 . C4 H2 O3)x . x Na

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):22

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS IN 2,5-Furandione, polymer with 2-methyl-1-propene, sodium salt (9CI) MF (C4 H8 . C4 H2 O3)x . \times Na

CM 1

CM 2

CM 3

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2,5-Furandione, polymer with 2-methyl-1-propene, aluminum sodium salt
(9CI)

MF (C4 H8 . C4 H2 O3) \times . \times Al . \times Na

CM 1

CM 2

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2,5-Furandione, polymer with 2-methyl-1-propene, ammonium salt (9CI)

MF (C4 H8 . C4 H2 O3) \times . \times H3 N

CM 1

CM 2

CM 3

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS

MF (C4 H8 . C4 H2 O3)x . x Fe . x Na

CM 1

CM 2 .

CM 3

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2,5-Furandione, polymer with 2-methyl-1-propene trimer (9CI)

((C4 H8)3 . C4 H2 O3)x

CI PMS

MF

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2,5-Furandione, polymer with 2-methyl-1-propene, magnesium sodium salt
(9CI)

MF (C4 H8 . C4 H2 O3) x . x Mg . x Na

CM 1

CM 2

CM 3

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 2,5-Furandione, polymer with 2-methyl-1-propene, magnesium salt (9CI)
MF (C4 H8 . C4 H2 O3)x . x Mg

CM 1

CM 2

CM 3

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS IN 2,5-Furandione, polymer with 2-methyl-1-propene, sodium zinc salt (9CI) MF (C4 H8 . C4 H2 O3)x . x Na . x Zn

CM 1

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS IN 2,5-Furandione, polymer with 2-methyl-1-propene, potassium salt (9CI) MF (C4 H8 . C4 H2 O3)x . x K

CM 1

CM 2

CM 3

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 2,5-Furandione, polymer with aziridine and 2-methyl-1-propene, sodium salt (9CI)

MF (C4 H8 . C4 H2 O3 . C2 H5 N) \times . \times Na

CM 1

CM 2

$$\overset{H}{ \searrow}$$

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS IN 2,5-Furandione, polymer with 2-methyl-1-propene, calcium sodium salt (9CI) MF (C4 H8 . C4 H2 O3)x . x Ca . x Na

CM 1

CM 2

CM 3

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 2,5-Furandione, polymer with 2-methyl-1-propene, zinc salt (9CI)
MF (C4 H8 . C4 H2 O3)x . x Zn

CM 1

CM 2

$$^{\text{CH}_2}_{||}_{\text{H}_3\text{C}-\text{C}-\text{CH}_3}$$

CM 3

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 2,5-Furandione, polymer with 2-methyl-1-propene, ammonium magnesium salt (9CI)
MF (C4 H8 . C4 H2 O3)x . x H3 N . x Mg

CM 1

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2,5-Furandione, polymer with 2-methyl-1-propene, alternating, ammonium salt (9CI)

MF (C4 H8 . C4 H2 O3) x . x H3 N

CM 1

CM 2

CM 3

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2,5-Furandione, polymer with 2-methyl-1-propene, graft (9CI)

MF (C4 H8 . C4 H2 O3)x

CI PMS

CM 1

$$^{\text{CH}_2}_{||}_{\text{H}_3\text{C}-\text{C}-\text{CH}_3}$$

CM 2

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 2,5-Furandione, polymer with aziridine and 2-methyl-1-propene, calcium sodium salt (9CI)

MF (C4 H8 . C4 H2 O3 . C2 H5 N) \times . \times Ca . \times Na

CM 1

CM 2

H N /

CM 3

CM 4

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2,5-Furandione, polymer with 2-methyl-1-propene, alternating (9CI)

MF (C4 H8 . C4 H2 O3) x

CI PMS, COM

'CM 1

CM 2

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2,5-Furandione, polymer with 2-methyl-1-propene, block (9CI)

MF (C4 H8 . C4 H2 O3)x

CI PMS, COM

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS IN 2,5-Furandione, polymer with 2-methyl-1-propene, calcium salt (9CI) MF (C4 H8 . C4 H2 O3)x . x Ca

CM 1

CM 2

CM 3

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 2,5-Furandione, polymer with 2-methyl-1-propene, block, ammonium salt (9CI)

MF (C4 H8 . C4 H2 O3) \times . \times H3 N

CM 1

CM 2

$$^{\text{CH}_2}_{||}_{\text{H}_3\text{C}-\text{C}-\text{CH}_3}$$

CM 3

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS IN 2,5-Furandione, polymer with 2-methyl-1-propene, lithium salt (9CI) MF (C4 H8 . C4 H2 O3)x . x Li

CM 3

L135 23 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2,5-Furandione, polymer with 2-methyl-1-propene (9CI)

MF (C4 H8 . C4 H2 O3) x

CI PMS, COM

CM 1

CM 2

ALL ANSWERS HAVE BEEN SCANNED

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STRUCTURE FILE UPDATES: 4 FEB 2002 HIGHEST RN 389569-32-8 DICTIONARY FILE UPDATES: 4 FEB 2002 HIGHEST RN 389569-32-8

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

The P indicator for Preparations was not generated for all of the

CAS Registry Numbers that were added to the H/Z/CA/CAplus files between 12/27/01 and 1/23/02. Use of the P indicator in online and SDI searches during this period, either directly appended to a CAS Registry Number or by qualifying an L-number with /P, may have yielded incomplete results. As of 1/23/02, the situation has been resolved. Also, note that searches conducted using the PREP role indicator were not affected.

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=> d sca 15

L5 3 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2-Butenedioic acid (2Z)-, polymer with butanedioic acid and 2-methyl-1-propene, ammonium salt (9CI)

MF (C4 H8 . C4 H6 O4 . C4 H4 O4)x . x H3 N

CM 1

CM 2

CH2 || H3C-C-CH3

CM 3

Double bond geometry as shown.

но2С Z

CM 4

HO2C-CH2-CH2-CO2H

Ches Ches Ches Cost

L5 3 ANSWERS REGISTRY COPYRIGHT 2002 ACS

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1): 2

IN Butanedioic acid, polymer with 2-methyl-1-propene (9CI)

MF (C4 H8 . C4 H6 O4)x

CI PMS

HO2C-CH2-CH2-CO2H

L5 3 ANSWERS REGISTRY COPYRIGHT 2002 ACS

IN 2-Butenedioic acid (2Z)-, polymer with butanedioic acid and 2-methyl-1-propene (9CI)

MF (C4 H8 . C4 H6 O4 . C4 H4 O4) x

CI PMS, COM

CM 1

CM 2

Double bond geometry as shown.

CM 3

 $HO_2C - CH_2 - CH_2 - CO_2H$

ALL ANSWERS HAVE BEEN SCANNED

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FILE COVERS 1907 - 1 Feb 2002 VOL 136 ISS 6 FILE LAST UPDATED: 30 Jan 2002 (20020130/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

The P indicator for Preparations was not generated for all of the CAS Registry Numbers that were added to the CAS files between 12/27/01 and 1/23/02. As of 1/23/02, the situation has been resolved. Searches and/or SDIs in the H/Z/CA/CAplus files incorporating CAS Registry Numbers with the P indicator executed between 12/27/01 and 1/23/02 may be incomplete. See the NEWS message on this topic for more information.

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L13 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS
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AN 2001:730530 HCAPLUS

DN 135:293950

TI A self-emulsifying system combined with a polymer matrix for transmucosal and transdermal delivery

IN Hong, Chung Il; Shin, Hee Jong; Ki, Min Hyo; Lee, Seok Kyu; Kweon, Don Sun

PA Chong Kun Dang Pharmaceutical Corp., S. Korea

SO PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K009-10

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1

FAN.CNT 1

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KIND DATE
                                            APPLICATION NO. DATE
     PATENT NO.
                                            _____
                            _____
     -----
                                        WO 2001-KR509 20010329
    WO 2001072282 A1 20011004
PΙ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU,
             LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD,
             SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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PRAI KR 2000-16257 A 20000329

A novel pharmaceutical compn. of a self-emulsifying matrix prepn., which is a prepn. for transmucosal or transdermal absorption in which a self-emulsifying drug delivery system is grafted to a polymeric matrix prepn. is described. For this, fatty alc., fatty acid or their derivs. of 6 to 20 carbon atoms having a drug absorptionaccelerating action through the skin or mucous membrane is used as an oil phase. Also, to increase the drug content in the matrix, a liq. phase material having a b.p. of 100.degree.C or more is used as a soln. adjuvant. Using such materials, the self-emulsifying system with a surfactant is prepd. A hydrophilic or hydrophobic polymer is added and dissolved in the self-emulsifying system, and the resulting mixt. is dried to prep. the matrix prepn. contg. the selfemulsifying system. The self-emulsifying matrix prepn. thus prepd. maintains a const. drug-releasing rate during its application period by virtue of its excellent stability and exhibits an extraordinarily high skin-absorption rate. For example, a selfemulsifying system was prepd. using oleyl alc. 10, glycerin (1) oleic acid ester 10, diethylene glycol monoethyl ether 40, and Cremophor RH40 40 parts, resp., as an oily phase. Upon the addn. of water, a selfemulsification was obtained. To 10 g of the selfemulsifying matrix prepd. was added 5 g of arecoline monohydrobromide as a drug. Sixty grams of poly(ethylene oxide) was dissolved into 30 g of water and 30 g of ethanol to form a polymer soln. This prepolymer soln. was added to the self-emulsifying system

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contq. the drug to give a transparent viscous soln., which was then dried
at 80.degree. for 10 min to form a self-emulsifying matrix with
a thickness of 505 .mu.m. During the process of drying, UV ray may be
irradiated for 5 min, if necessary.
polymer matrix self emulsifying system drug delivery;
transmucosal transdermal delivery polymer self emulsifying
system
Tobacco smoke
   (agents for cessation of; self-emulsifying system combined
   with polymer matrix for transmucosal and transdermal delivery)
Respiratory tract
   (agents for; self-emulsifying system combined with polymer
   matrix for transmucosal and transdermal delivery)
Nervous system
   (autonomic, agents for; self-emulsifying system combined with
   polymer matrix for transmucosal and transdermal delivery)
Solvents
   (cosolvents; self-emulsifying system combined with polymer
   matrix for transmucosal and transdermal delivery)
Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (esters, C6-20; self-emulsifying system combined with polymer
   matrix for transmucosal and transdermal delivery)
Polyoxyalkylenes, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (esters; self-emulsifying system combined with polymer matrix
   for transmucosal and transdermal delivery)
Alcohols, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (fatty, esters, C6-20; self-emulsifying system combined with
   polymer matrix for transmucosal and transdermal delivery)
Alcohols, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (fatty, ethoxylated, C6-20; self-emulsifying system combined
   with polymer matrix for transmucosal and transdermal delivery)
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (hydrogenated, ethoxylated; self-emulsifying system combined
   with polymer matrix for transmucosal and transdermal delivery)
Sexual behavior
   (impotence; self-emulsifying system combined with polymer
   matrix for transmucosal and transdermal delivery)
Drug delivery systems
   (mucosal; self-emulsifying system combined with polymer
   matrix for transmucosal and transdermal delivery)
Anti-inflammatory agents
   (nonsteroidal; self-emulsifying system combined with polymer
   matrix for transmucosal and transdermal delivery)
Mucous membrane
Skin
   (permeation through; self-emulsifying system combined with
   polymer matrix for transmucosal and transdermal delivery)
Biological transport
   (permeation; self-emulsifying system combined with polymer
   matrix for transmucosal and transdermal delivery)
Antioxidants
   (pharmaceutical; self-emulsifying system combined with
   polymer matrix for transmucosal and transdermal delivery)
Alcohols, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
   (polyhydric, esters; self-emulsifying system combined with
   polymer matrix for transmucosal and transdermal delivery)
Fatty acids, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
```

(satd., C6-20; self-emulsifying system combined with polymer

matrix for transmucosal and transdermal delivery)

```
ΙT
    Analgesics
    Antibacterial agents
    Antiemetics
    Antihistamines
    Antitumor agents
    Cardiovascular agents
    Crosslinking agents
    Dissolution rate
     Fungicides
    Mental disorder
     Plasticizers
     Preservatives
     Skin, disease
     Skin preparations (pharmaceutical)
     Surfactants
        (self-emulsifying system combined with polymer matrix for
       transmucosal and transdermal delivery)
    Butyl rubber, biological studies
    Gelatins, biological studies
    Glycerides, biological studies
    Isobutylene rubber
     Polymers, biological studies
     Polyoxyalkylenes, biological studies
     Polysiloxanes, biological studies
     Steroids, biological studies
    Tocopherols
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (self-emulsifying system combined with polymer matrix for
       transmucosal and transdermal delivery)
IT
    Emulsification
        (spontaneous; self-emulsifying system combined with polymer
       matrix for transmucosal and transdermal delivery)
ΙT
     Drug delivery systems
        (transdermal; self-emulsifying system combined with polymer
       matrix for transmucosal and transdermal delivery)
ΙT
    Fatty acids, biological studies
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (unsatd., C6-20; self-emulsifying system combined with
       polymer matrix for transmucosal and transdermal delivery)
ΙT
    9010-85-9
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (butyl rubber, self-emulsifying system combined with polymer
       matrix for transmucosal and transdermal delivery)
IT
     9003-27-4
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (isobutylene rubber, self-emulsifying system combined with
       polymer matrix for transmucosal and transdermal delivery)
ΙT
    50-28-2, Estradiol, biological studies
                                             51-21-8, Fluorouracil
                                                                      51-34-3,
                  54-11-5, Nicotine 55-63-0, Nitroglycerin
                                                                56-81-5,
    Scopolamine
    Glycerol, biological studies
                                    57-47-6, Physostigmine
                                                             57-55-6D,
     Propylene glycol, esters 57-83-0, Progestin, biological studies
                           58-74-2, Papaverine
     58-22-0, Testosterone
                                                   60-54-8, Tetracycline
                        64-17-5, Ethanol, biological studies
     63-75-2, Arecoline
                                                                 67 - 64 - 1,
    Acetone, biological studies 76-57-3, Codeine 76-99-3, Methadone
                               79-10-7D, Acrylic acid, esters and nitrile
    77-93-0, Triethyl citrate
    derivs., polymers
                        79-41-4D, Methacrylic acid, esters, polymers
    87-33-2, Isosorbide dinitrate
                                    103-90-2, Acetaminophen
                                                              106-12-7
    107-92-6, Ethylacetic acid, biological studies
                                                     108-46-3, Resorcinol,
    biological studies 110-15-6, Succinic acid, biological studies
    111-02-4, Squalene
                         111-90-0, Diethylene glycol monoethyl ether
    112-80-1, Oleic acid, biological studies 113-92-8, Chlorpheniramine
    143-28-2, Oleyl alcohol
                              146-48-5, Yohimbin
                                                    300-08-3, Arecoline
                                             437-38-7, Fentanyl
    hydrobromide
                   302-79-4, Retinoic acid
                                                                   506-43-4,
                                              745-65-3, Alprostadil
                                                                      872-50-4,
    Linoleyl alcohol
                        569-65-3, Meclizine
    N-Methyl-2-pyrrolidone, biological studies 1404-04-2, Neomycin
     4205-90-7, Clonidine 5104-49-4, Flurbiprofen 9002-89-5, Polyvinyl
```

9003-05-8, Polyacrylamide

9003-01-4, Poly(acrylic acid)

```
9003-20-7, Polyvinyl acetate 9003-27-4, Polyisobutylene
     9003-39-8, Polyvinylpyrrolidone 9004-32-4, Carboxymethyl cellulose
                                               9004-62-0, Hydroxyethyl cellulose
     9004-38-0, Cellulose acetate phthalate
     9004-64-2, Hydroxypropyl cellulose
                                           9004-65-3, Hydroxypropyl methyl
                 9005-32-7, Alginic acid
                                          9011-16-9, Poly(methyl vinyl
                                                      9016-00-6,
     ether-maleic anhydride)
                               9012-76-4, Chitosan
                            9050-31-1, Hydroxypropylmethyl cellulose phthalate
     Polydimethylsiloxane
                             19216-56-9, Prazosin
                                                    22071-15-4, Ketoprofen
     18559-94-9, Albuterol
                              25086-89-9, Vinyl acetate-vinylpyrrolidone
     23110-15-8, Fumagillin
                                                       25322-68-3, Polyethylene
                 25087-26-7, Poly(methacrylic acid)
             25322-68-3D, Polyethylene glycol, esters
                                                         25496-72-4
                                                                      26545-74-4
     26787-78-0, Amoxicillin 27194-74-7
                                           30811-69-9, Polyvinylacrylate
                                        36322-90-4, Piroxicam
                                                                 37148-27-9,
     31900-57-9, Polydimethylsiloxane
                   60017-72-3
                                74103-06-3, Ketorolac 76009-37-5
                                                                      78213-16-8
     Clenbuterol
                                                             205822-93-1
     99614-02-5, Ondansetron
                               106392-12-5, Poloxamer 124
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (self-emulsifying system combined with polymer matrix for
        transmucosal and transdermal delivery)
              THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Meier, W; Colloid Polym Sci 1997, V275(6), P530 HCAPLUS
(2) University Of Texas System; WO 9307861 1993 HCAPLUS
     9010-85-9
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (butyl rubber, self-emulsifying system combined with polymer
        matrix for transmucosal and transdermal delivery)
RN
     9010-85-9 HCAPLUS
     1,3-Butadiene, 2-methyl-, polymer with 2-methyl-1-propene (9CI)
                                                                       (CA INDEX
CN
     NAME)
     CM
          1
     CRN
         115-11-7
     CMF
         C4 H8
    CH<sub>2</sub>
H3C-C-CH3
          2
    CM
     CRN
          78-79-5
     CMF
         C5 H8
    CH<sub>2</sub>
H_3C-C-CH=CH_2
ΙT
     9003-27-4
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (isobutylene rubber, self-emulsifying system combined with
        polymer matrix for transmucosal and transdermal delivery)
RN
     9003-27-4 HCAPLUS
     1-Propene, 2-methyl-, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
          1
     CRN
         115-11-7
     CMF C4 H8
```

```
BR 9709204
                       Α
                            19990810
                                           BR 1997-9204
                                                             19970425
     CZ 287999
                       В6
                            20010314
                                           CZ 1998-3476
                                                             19970425
    NO 9805021
                       Α
                            19981230
                                           NO 1998-5021
                                                             19981028
PRAI US 1996-640268
                       B2
                            19960430
     US 1996-759547
                       Α
                            19961205
     WO 1997-US6905
                       W
                            19970425
     The invention relates to articles useful in cleansing, and particularly to
AB
     wet-like cleansing wipes that are esp. useful for hard surface cleaning,
     and in personal cleansing such as baby wipes and particularly for removal
     of perianal soils. These articles comprise: a carrier; and an
     emulsion applied to the carrier. The emulsion comprises
     (1) from about 2 to about 60% of a continuous solidified lipid phase
     comprising a waxy lipid material having a m.p. of about 30.degree. C. or
     higher, (2) from about 39 to about 97% of an internal polar (e.g., water)
     phase dispersed in the lipid phase; (3) an effective amt. of a non-silicon
     contq. emulsifier, where the emulsifier has a
     viscosity at 55.degree. C. of greater than about 500 cP; and (4) and an
     optional second emulsifier having a viscosity at 55.degree. C.
     of less than about 400 cP. Because the emulsion comprises a
     waxy external phase, the internal polar phase is retained in the
     emulsion until in-use shear pressures break the emulsion
     , thereby providing desired moisture for cleaning. A liq. phase was
    prepd. contg. yellow ceresin wax 300, Petrolatum 100, and Lubrizol
     OS#121863 200g, and a polar phase contg. NaCl 50, Dantogard 25, and distd.
     water 4325q.
     cleaning article internal phase inverse emulsion
ST
IT
     Beeswax
     Coating process
     Extrusion, nonbiological
     Ozocerite
     Paper
     Spraying
     Viscosity
        (cleaning articles treated with a high internal phase inverse
        emulsion)
TT
     Ceresin
     Paraffin waxes, biological studies
     Petrolatum
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (cleaning articles treated with a high internal phase inverse
        emulsion).
IΤ
        (cleansing; cleaning articles treated with a high internal phase
        inverse emulsion)
IT
     Cosmetics
        (emulsions, inverse; cleaning articles treated with a high
        internal phase inverse emulsion)
IT
        (internal; cleaning articles treated with a high internal phase inverse
        emulsion)
     Polysiloxanes, biological studies
TT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (polyoxyalkylene-; cleaning articles treated with a high internal phase
        inverse emulsion)
ΙT
     Polyoxyalkylenes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (polysiloxane-; cleaning articles treated with a high internal phase
        inverse emulsion)
ΙT
    Medical goods
        (wipes; cleaning articles treated with a high internal phase inverse
        emulsion)
```

108-30-5D, Succinic anhydride, polyisobutylene-substituted

ΙT

```
110-15-6D, Succinic acid, polyisobutylene-substituted
     9003-27-4D, Polyisobutylene, succinate derivs.
     Ethylene oxide-12-hydroxystearic acid copolymer
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (cleaning articles treated with a high internal phase inverse
        emulsion)
     7732-18-5, Water, biological studies
     RL: BUU (Biological use, unclassified); PEP (Physical, engineering or
     chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
        (cleaning articles treated with a high internal phase inverse
        emulsion)
     9002-88-4, Polyethylene
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (waxes; cleaning articles treated with a high internal phase inverse
        emulsion)
RE.CNT
        29
              THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Anon; GB 1059541 1967
(2) Anon; FR 2321389 1976 HCAPLUS
(3) Anon; IN 155758 1981 HCAPLUS
(4) Anon; GB 2055689 1981 HCAPLUS
(5) Anon; CA 1132908 1982 HCAPLUS
(6) Anon; GB 2113236 1983 HCAPLUS
(7) Anon; EP 0110678 A2 1984 HCAPLUS
(8) Anon; DE 3341770 A1 1985 HCAPLUS
(9) Anon; WO 8703613 1987 HCAPLUS
(10) Anon; EP 0259034 A2 1988
(11) Anon; EP 0365160 A2 1989 HCAPLUS
(12) Anon; JP 02-152920 1990 HCAPLUS
(13) Anon; JP 03-168118 1991
(14) Anon; EP 0501791 A3 1992 HCAPLUS
(15) Anon; JP 05-070337 1993 HCAPLUS
(16) Anon; EP 0545002 A1 1993 HCAPLUS
(17) Anon; JP 91-44-426 J5 1994
(18) Anon; WO 9402120 1994 HCAPLUS
(19) Anon; EP 0631774 A1 1995 HCAPLUS
(20) Anon; WO 9516824 1995 HCAPLUS
(21) Anon; WO 9614835 1996 HCAPLUS
(22) Buchalter; US 3896807 1975 HCAPLUS
(23) Dow Corning Corporation; Dow Corning Q2-5200 Formulation Aid 1990
(24) Haluska; US 2868824 1959 HCAPLUS
(25) Luszczak; US 3847637 1974 HCAPLUS
(26) Ratledge; US 3819530 1974 HCAPLUS
(27) Rense; US 3215707 1965 HCAPLUS
(28) Rense; US 3231587 1966
(29) Scheuer; US 3818533 1974
     110-15-6D, Succinic acid, polyisobutylene-substituted
     9003-27-4D, Polyisobutylene, succinate derivs.
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (cleaning articles treated with a high internal phase inverse
        emulsion)
     110-15-6 HCAPLUS
     Butanedioic acid (9CI)
                             (CA INDEX NAME)
HO2C-CH2-CH2-CO2H
     9003-27-4 HCAPLUS
     1-Propene, 2-methyl-, homopolymer (9CI)
                                              (CA INDEX NAME)
```

CM 1

ΙT

IT

RE

ΙT

RN

CN

RN

CN

CRN 115-11-7 CMF C4 H8

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СH<sub>2</sub>
||
H<sub>3</sub>C-С-СH<sub>3</sub>
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=> d all hitstr tot
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L14 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2002 ACS
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AN 2001:813413 HCAPLUS

DN 135:348917

TI Patch and method for transdermal delivery of bupropion base

IN Midha, Kamal K.; Junginger, Hans E.; Hirsh, Mark

PA Peierce Management LLC, USA

SO U.S., 12 pp., Cont.-in-part of U.S. 309,075.

CODEN: USXXAM

DT Patent

LA English

IC ICM A61F013-02

NCL 424448000

CC 63-6 (Pharmaceuticals)

FAN.CNT 2

	2111	_							-									
	PATENT NO.				KI	ND	DATE			A	PPLI	CATI	ON N	Ο.	DATE			
ΡI	US 6312716			В	1	20011106			US 2000-562178					20000502				
	US	6280763			В	1	20010828			US 1999-309075				19990510				
	EΡ	1051971			A	1	20001115			EP 2000-303945			5	20000510				
		R:	AT,	ΒE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO										
	JP	2000327564		A.	2	20.001128			JE	20	00-1	3710	6	2000	0510			
PRAI	US	1999-	-3090	75	A.	2	1999	0510										
	US	2000-	-5621	178	Α		2000	0502										

AB The invention includes a patch and method for transdermal delivery of bupropion base. In the method of this invention, a patient is administered a bupropion base in an amt. effective to alleviate withdrawal symptoms and to prevent or reduce craving of nicotine in said patient. Alternatively, an effective amt. of bupropion base is delivered to alleviate depression in a patient or to treat obesity. A transdermal patch includes a bupropion base. The bupropion base can be mixed with an acceptable pharmaceutical carrier. A transdermal pharmaceutical patch contained racemic bupropion base 18, polyisobutylene adhesive 20, vitamin E succinate 2, and petroleum jelly 60%.

ST pharmaceutical transdermal patch bupropion

IT Stabilizing agents

(patch and method for transdermal delivery of bupropion base)

IT Acrylic polymers, biological studies

Carbohydrates, biological studies

Petrolatum

Polysiloxanes, biological studies

Polyurethanes, biological studies

Tocopherols

Waxes

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (patch and method for transdermal delivery of bupropion base)

IT Adhesives

(pressure-sensitive; patch and method for transdermal delivery of bupropion base)

IT Polyesters, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (silicone-coated; patch and method for transdermal delivery of bupropion base)

```
IT
     Drug delivery systems
        (transdermal; patch and method for transdermal delivery of bupropion
        base)
     58-95-7, Vitamin E acetate
                                  137-66-6, Ascorbic acid palmitate
IT
     7732-18-5, Water, biological studies 9003-27-4, Polyisobutylene
     25013-16-5, Butylated hydroxy anisole
                                              34911-55-2, Bupropion
     37311-39-0, Vitamin E succinate
                                       144445-75-0, (+)-Bupropion
     144445-76-1, (-)-Bupropion
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (patch and method for transdermal delivery of bupropion base)
              THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
        2
RE
(1) Anon; WO 9938502 1999 HCAPLUS
(2) Anon; WO 9938503 1999 HCAPLUS
     9003-27-4, Polyisobutylene 37311-39-0, Vitamin E
     succinate
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (patch and method for transdermal delivery of bupropion base)
RN
     9003-27-4 HCAPLUS
     1-Propene, 2-methyl-, homopolymer (9CI) (CA INDEX NAME)
CN
     CM
     CRN
         115-11-7
     CMF C4 H8
    CH<sub>2</sub>
H3C-C-CH3
RN
     37311-39-0 HCAPLUS
CN
     Vitamin E, butanedioate (9CI) (CA INDEX NAME)
     CM
          1
     CRN
          1406-18-4
          Unspecified
     CMF
     CCI
         MAN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
          2
     CM
     CRN
         110-15-6
     CMF C4 H6 O4
HO_2C-CH_2-CH_2-CO_2H
     ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2002 ACS
L14
     2001:192579 HCAPLUS
ΑN
DN
     134:242652
     Reduction of skin reactions caused by transdermal drug delivery
ΤI
     Cormier, Michel J. N.; Daddona, Peter E.; Johnson, Juanita A.
IN
PΑ
     Alza Corporation, USA
     U.S., 22 pp., Cont.-in-part of U.S. Ser. No. 892,118.
SO
     CODEN: USXXAM
DT
     Patent
LA
     English
     ICM A61F013-02
IC
NCL
     424464000
```

CC

63-6 (Pharmaceuticals)

```
FAN.CNT 1
                     KIND DATE
                                           APPLICATION NO. DATE
     PATENT NO.
                                           _____
                     ____
    US 6203817 B1
                            20010320
                                           US 1998-92606
                                                           19980605
PΙ
     US 1997-38425 P
US 1997-892118 A2
                            19970219
PRAI US 1997-38425
                            19970714
     Transdermal compns., devices, and methods for the administration of a drug
AB
     at reduced skin irritation levels are disclosed. More particularly, this
     invention relates to novel methods, compns., and devices for the redn. or
     elimination of irritation or sensitization caused by an irritating or
     sensitizing drug when it is delivered transdermally. According to a
     preferred embodiment, transdermal administration of a drug salt of a
     non-zwitterionic drug is disclosed wherein the drug salt comprises a
     combination of surface activity and a low octanol-water partition coeff.
     Such drug salts have been found to reduce irritation or sensitization to
     the drug being delivered while achieving therapeutically effective
     transdermal fluxes. A transdermal formulation contg. chlorpromazine base
     (I) 0.8, acetic acid 0.144, hydroxyethyl cellulose 3, and water q.s. 100%
     (vol./vol.) was prepd. The flux of I in guinea pig skin was 12.3
     .mu.g/cm2.h and produced little irritation.
     skin reaction transdermal drug delivery chlorpromazine
ST
IT
     Drug delivery systems
        (gels, topical; redn. of skin reactions caused by transdermal drug
        delivery)
ΙT
     Skin, disease
        (irritation; redn. of skin reactions caused by transdermal drug
        delivery)
IT
     Solvents
        (redn. of skin reactions caused by transdermal drug delivery)
IT
     Polyoxyalkylenes, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (redn. of skin reactions caused by transdermal drug delivery)
     Acrylic polymers, biological studies
ΙT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (redn. of skin reactions caused by transdermal drug delivery)
     Polysiloxanes, biological studies
IT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (redn. of skin reactions caused by transdermal drug delivery)
     Polyurethanes, biological studies
IΤ
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (redn. of skin reactions caused by transdermal drug delivery)
ΙT
     Drug delivery systems
        (transdermal; redn. of skin reactions caused by transdermal drug
        delivery)
     Acids, biological studies
IT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (weak; redn. of skin reactions caused by transdermal drug delivery)
IT
     Alkali metal hydroxides
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (week; redn. of skin reactions caused by transdermal drug delivery)
     57-55-6, Propylene glycol, uses 64-17-5, Ethanol, uses 25322-68-3,
ΙT
     Polyethylene glycol.
     RL: NUU (Other use, unclassified); USES (Uses)
        (redn. of skin reactions caused by transdermal drug delivery)
     50-21-5, Lactic acid, biological studies 50-53-3, Chlorpromazine,
ΙT
     biological studies 56-87-1, Lysine, biological studies
                                                                 64-19-7, Acetic
                                71-00-1, Histidine, biological studies
     acid, biological studies
     74-79-3, Arginine., biological studies 77-86-1, Tromethamine
     Citric acid, biological studies 79-09-4, Propionic acid, biological studies 79-14-1, Glycolic acid., biological studies 80-69-3, Tart
                                                             80-69-3, Tartronic
            87-69-4, Tartaric acid 102-71-6, Triethanolamine, biological
     acid
     studies 110-15-6, Succinic acid, biological studies 110-16-7,
     Maleic acid, biological studies 110-17-8, Fumaric acid, biological
               110-91-8, Morpholine, biological studies
                                                         111-42-2,
     Diethanolamine, biological studies 127-17-3, Pyruvic acid, biological
```

141-43-5, Monoethanolamine, biological studies 526-95-4,

studies

```
2068-83-9
                     594-61-6
                                1508-65-2, Oxybutynin hydrochloride
    Gluconic acid
                             6284-40-8, Methylglucamine
                                                           6556-12-3, Glucuronic
    5633-20-5, Oxybutynin
            6915-15-7, Malic acid 9003-27-4, Polyisobutylene
                                                 24937-78-8, Ethylene vinyl
    14798-03-9, Ammonium, biological studies
                         54910-89-3, Fluoxetine
                                                  56296-78-7, Fluoxetine
    acetate copolymer
                                   329976-22-9
                                                  329976-23-0
                                                                329976-24-1
                     202256-98-2
    hydrochloride
                                                              329976-34-3
                   329976-28-5
                                 329976-31-0
                                                329976-33-2
     329976-26-3
                                                329976-38-7
                   329976-36-5
                                 329976-37-6
                                                              329976-39-8
     329976-35-4
     329976-40-1
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (redn. of skin reactions caused by transdermal drug delivery)
              THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
(1) Anon; WO 9218005 1992 HCAPLUS
(2) Anon; WO 9219226 1992 HCAPLUS
(3) Anon; DE 4301783 C1 1994 HCAPLUS
(4) Anon; WO 9421262 1994 HCAPLUS
(5) Anon; WO 9501167 1995 HCAPLUS
(6) Anon; WO 9509006 1995 HCAPLUS
(7) Anon; WO 9528151 1995 HCAPLUS
(8) Anon; WO 9637231 1996 HCAPLUS
(9) Anon; WO 9640259 1996 HCAPLUS
(10) Anon; WO 9710816 1997 HCAPLUS
(11) Chandrasekaran; US 4201211 1980
(12) Chandrasekaran; US 4286592 1981
(13) Cleary; Transdermal Delivery Systems: A Medical Rationale 1993, P17 HCAPLUS
(14) Higuchi; US 4144317 1979 HCAPLUS
(15) Holland; US 429356 1890
(16) Knepp; CRC Critical Reviews in Therapeutic Drug Carrier Systems 1987,
    V4(1), P13 MEDLINE
(17) Messing; US 4035511 1977 HCAPLUS
(18) Messing; US 4083982 1978
(19) Urquhart; US 4031894 1977 HCAPLUS
(20) Zaffaroni; US 3598122 1971 HCAPLUS
(21) Zaffaroni; US 3598123 1971 HCAPLUS
(22) Zaffaroni; US 3731683 1973 HCAPLUS
(23) Zaffaroni; US 3797494 1974 HCAPLUS
     110-15-6, Succinic acid, biological studies 9003-27-4,
     Polyisobutylene
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (redn. of skin reactions caused by transdermal drug delivery)
     110-15-6 HCAPLUS
     Butanedioic acid (9CI) (CA INDEX NAME)
HO_2C-CH_2-CH_2-CO_2H
     9003-27-4 HCAPLUS
     1-Propene, 2-methyl-, homopolymer (9CI)
                                              (CA INDEX NAME)
     CM
     CRN
         115-11-7
     CMF
         C4 H8
   · CH<sub>2</sub>
H3C-C-CH3
     ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2002 ACS
     2000:290827
                 HCAPLUS
```

RE

IT

RN

CN

RN

CN

L14 AN

DN

132:326061

```
ΤI
     Method of preparaing pressure sensitive transdermal adhesive matrix
     patches containing hydrophilic salts of drugs
IN
     Venkateshwaran, Srinivasan; Fikstad, David; Ebert, Charles D.
     Theratech, Inc., USA
PA
SO
     PCT Int. Appl., 56 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM A61K009-70
CC
     63-6 (Pharmaceuticals)
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
                                          _____
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                     ----
                           _____
     WO 2000024386
                           20000504
                                          WO 1999-US20814 19990908
PΙ
                     A1
            AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
            CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD,
            MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
             SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG,
            KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
            ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
            CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                          EP 1999-945640
                                                            19990908
                           20010725
     EP 1117389
                      Α1
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     AU 9958206
                                          AU 1999-58206
                                                            19990909
                      A1
                            20000515
PRAI US 1998-149523
                      Α
                            19980908
     WO 1999-US20814
                      W
                            19990908
     A method of making a pressure sensitive matrix patch for transdermal
AB
     delivery of a drug is disclosed. The method includes the steps of
     dissolving a hydrophilic salt form of the drug in the water phase of an
     aq. dispersion of a hydrophobic pressure sensitive adhesive, casting the
     resulting mixt. as a thin film, and evapg. the water. The phys. stability
     of the drug in the film is excellent, and crystn. of the drug is
     inhibited. A method of increasing the transdermal flux of an acidic drug
     is also disclosed. Transdermal patches with 10% ketorolac free acid were
     prepd. by mixing ketorolac in propylene glycol with iso-Pr myristate and
     adding to Durotak-2852. After solvent evapn., the resulting adhesive film
     was laminated to a release liner.
     pressure sensitive adhesive matrix patch drug salt; transdermal adhesive
ST
     patch drug salt
IT
     Biological transport
        (permeation; pressure sensitive transdermal adhesive matrix patches
        contg. hydrophilic salts of drugs)
ΙT
     Permeation enhancers
        (pressure sensitive transdermal adhesive matrix patches contg.
        hydrophilic salts of drugs)
TΤ
     Acrylic polymers, biological studies
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (pressure sensitive transdermal adhesive matrix patches contg.
        hydrophilic salts of drugs)
ΙT
     Adhesives
        (pressure-sensitive; pressure sensitive transdermal adhesive matrix
       patches contg. hydrophilic salts of drugs)
ΙŤ
     Drug delivery systems
        (transdermal; pressure sensitive transdermal adhesive matrix patches
        contg. hydrophilic salts of drugs)
                                                            129-06-6, Sodium
ΙT
     73-78-9, Lidocaine hydrochloride 81-81-2, Warfarin
              137-58-6, Lidocaine 4205-90-7, Clonidine 4205-91-8,
     warfarin
                                                               15307-86-5
                              15307-79-6, Diclofenac sodium
     Clonidine hydrochloride
     Diclofenac 33386-08-2, Buspirone hydrochloride 36505-84-7, Buspirone
     74103-07-4, Ketorolac tromethamine
     RL: BPR (Biological process); DEV (Device component use); THU (Therapeutic
     use); BIOL (Biological study); PROC (Process); USES (Uses)
```

(pressure sensitive transdermal adhesive matrix patches contg.

```
hydrophilic salts of drugs)
ΙT
     50-98-6, Ephedrine hydrochloride
                                        51-42-3, Epinephrine bitartrate
     55-48-1, Atropine sulfate
                                 59-97-2, Tolazoline hydrochloride
                               61-76-7, Phenylephrine hydrochloride
     Dibucaine hydrochloride
                                                                       64 - 75 - 5,
     Tetracycline hydrochloride 69-52-3, Sodium ampicillin
                                                               113-92-8,
                                114-49-8, Scopolamine hydrobromide
    Chlorpheniramine maleate
                                                                      125-69-9,
     Dextromethorphan hydrobromide
                                    136-47-0, Tetracaine hydrochloride
     154-41-6, Phenylpropanolamine hydrochloride
                                                   318-98-9, Propranolol
                     357-08-4, Naloxone hydrochloride
                                                        440-17-5,
    hydrochloride
     Trifluoperazine hydrochloride
                                     980-71-2, Brompheniramine maleate
                                  2016-88-8, Amiloride hydrochloride
     990-73-8, Fentanyl citrate
     2058-46-0, OxyTetracycline hydrochloride 6283-92-7, Ceraphyl 31
                                 15826-37-6, Sodium cromolyn
     9003-27-4, Polyisobutylene
     16676-29-2, Naltrexone hydrochloride
                                           18559-94-9, Albuterol
                                                                     23031-32-5,
                           23277-43-2, Nalbuphine hydrochloride
                                                                   24937-78-8,
    Terbutaline sulfate
           25339-99-5
                        28813-39-0, Pindolol hydrochloride
                                                              31677-93-7,
                               34580-14-8, Ketotifen fumarate
                                                                 49746-04-5,
     Bupropion hydrochloride
     Thiothixene hydrochloride
                                 51022-70-9, Albuterol sulfate
     56392-17-7, Metoprolol tartrate
                                      62868-63-7, Apomorphine sulfate
     69657-51-8, Sodium acyclovir
                                    74103-06-3, Ketorolac 98418-47-4,
    Metoprolol succinate
                            162731-15-9
    RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (pressure sensitive transdermal adhesive matrix patches contg.
        hydrophilic salts of drugs)
RE.CNT
              THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) James, N; US 5633009 A 1997 HCAPLUS
(2) Judy, M; US 5589498 A 1996 HCAPLUS
(3) Kishore, S; US 5310559 A 1994
(4) Masaki, S; US 5368860 A 1994
(5) Theratech; WO 9809591 A 1998
(6) Virotex; WO 9955312 A 1999 HCAPLUS
ΙT
    9003-27-4, Polyisobutylene 98418-47-4, Metoprolol
    succinate
    RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (pressure sensitive transdermal adhesive matrix patches contg.
        hydrophilic salts of drugs)
     9003-27-4 HCAPLUS
RN
CN
    1-Propene, 2-methyl-, homopolymer (9CI) (CA INDEX NAME)
    CM
    CRN
         115-11-7
    CMF C4 H8
    CH<sub>2</sub>
H3C-C-CH3
    98418-47-4 HCAPLUS
RN
    Butanedioic acid, compd. with 1-[4-(2-methoxyethyl)phenoxy]-3-[(1-
CN
    methylethyl)amino]-2-propanol (1:2) (9CI) (CA INDEX NAME)
    CM
          1
    CRN 51384-51-1
    CMF C15 H25 N O3
```

$$\begin{array}{c} \text{CH}_2-\text{CH}_2-\text{OMe} \\ \\ \text{i-PrNH-CH}_2-\text{CH-CH}_2-\text{O} \end{array}$$

CM 2

CRN 110-15-6 CMF C4 H6 O4

 $HO_2C-CH_2-CH_2-CO_2H$

```
L14 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2002 ACS
```

AN 1999:731748 HCAPLUS

DN 131:342019

TI Pressure-sensitive adhesive matrix patches for delivery of salts of pharmaceutical agents

IN Venkateshwaran, Srinivasan; Fikstad, David; Ebert, Charles D.

PA Theratech, Inc., USA

SO U.S., 10 pp. CODEN: USXXAM

DT Patent

LA English

IC ICM A61L015-16

NCL 424449000

CC 63-6 (Pharmaceuticals)

FAN. CNT 1

L WIA	~1N T	±			
	PAT	TENT NO.	KIND	DATE	APPLICATION NO. DATE
ΡI	US	5985317	Α	19991116	US 1996-706624 19960906
	JΡ	2000517343	T2	20001226	JP 1998-512764 19970829
PRAI	US	1996-706624	Α	19960906	
	WO	1997-US15302	W	19970829	

Amethod of transdermally or transmucosally delivering a hydrophilic salt form of a drug with a water-based pressure sensitive hydrophobic adhesive matrix patch optionally contg. a permeation enhancer is disclosed. A matrix patch comprising a water-based pressure sensitive hydrophobic adhesive, a hydrophilic salt form of a drug, and optionally a permeation enhancer for transdermal or transmucosal delivery of the hydrophilic salt form of the drug is also disclosed. Pressure sensitive adhesive matrix systems were prepd. with buspirone.cntdot.HCl at a concn. of 2 % and sucrose laurate at 5 % in a water-based acrylic adhesive, NACOR 72-9965.

ST transdermal patch hydrophobic adhesive drug salt; buspirone hydrochloride acrylic adhesive patch

IT Drug delivery systems

(mucosal; pressure-sensitive adhesive matrix patches for delivery of salts of drugs)

IT Drug bioavailability

(pressure-sensitive adhesive matrix patches for delivery of salts of drugs)

IT Isobutylene rubber

Natural rubber, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(pressure-sensitive adhesive matrix patches for delivery of salts of drugs)

IT Adhesives

(pressure-sensitive; pressure-sensitive adhesive matrix patches for delivery of salts of drugs)

IT Drug delivery systems

(transdermal; pressure-sensitive adhesive matrix patches for delivery of salts of drugs) ΙT 9003-27-4 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (isobutylene rubber, pressure-sensitive adhesive matrix patches for delivery of salts of drugs) IT 6283-92-7, Lauryl lactate 37266-93-6, Sucrose laurate RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (permeation enhancer; pressure-sensitive adhesive matrix patches for delivery of salts of drugs) 50-98-6, Ephedrine hydrochloride 51-42-3, Epinephrine bitartrate IT 55-48-1, Atropine sulfate 59-97-2, Tolazoline hydrochloride 61-12-1, Dibucaine hydrochloride 61-76-7, Phenylephrine hydrochloride 64 - 75 - 573-78-9, Tetracycline hydrochloride 69-52-3, Sodium ampicillin 113-92-8, Chlorpheniramine maleate 114-49-8, Lidocaine hydrochloride 125-69-9, Dextromethorphan hydrobromide Scopolamine hydrobromide 136-47-0, Tetracaine hydrochloride 154-41-6, Phenylpropanolamine 318-98-9, Propranolol hydrochloride 357-08-4, Naloxone hydrochloride hydrochloride 440-17-5, Trifluoperazine hydrochloride 980-71-2, 990-73-8, Fentanyl citrate 2016-88-8, Brompheniramine maleate Amiloride hydrochloride 2058-46-0, Oxytetracycline hydrochloride 4205-91-8, Clonidine hydrochloride 9003-27-4, Polyisobutylene 15307-79-6, Diclofenac sodium 15826-37-6, Sodium cromolyn 16676-29-2, Naltrexone hydrochloride 23031-32-5, Terbutaline sulfate 23277-43-2, Nalbuphine hydrochloride 28813-39-0, Pindolol hydrochloride 31677-93-7, Bupropion hydrochloride 33386-08-2, Buspirone hydrochloride 49746-04-5, Thiothixene hydrochloride 34580-14-8, Ketotifen fumarate 56392-17-7, Metoprolol tartrate 62868-63-7, Apomorphine sulfate 69657-51-8, Sodium acyclovir 74103-07-4, Ketorolac tromethamine 98418-47-4, Metoprolol succinate 250216-15-0, Nacor 72-9965 250217-51-7, Duro-Tak 2516 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pressure-sensitive adhesive matrix patches for delivery of salts of drugs) THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 17 (1) Chandrasekaran; US 4201211 1980 (2) Chang; US 4956171 1990 HCAPLUS (3) Coughlan; US 4564010 1986 HCAPLUS (4) Gale; US 4645502 1987 HCAPLUS (5) Gale; US 4904475 1990 HCAPLUS (6) Granger; US 5149538 1992 HCAPLUS (7) Kenealy; US 5633009 1997 HCAPLUS (8) Keshary; US 5002773 1991 (9) Mohr; US 5589498 1996 HCAPLUS (10) Patel; US 4863970 1989 HCAPLUS (11) Sablotsky; US 5186938 1993 (12) Scheuplein, R; Permeability of the Skin 51 Physiological Reviews 1972, P702 (13) Shah; US 5310559 1994 (14) Stricker; US 4409206 1983 HCAPLUS (15) Sunami; US 5368860 1994 (16) Urquhart; US 4262003 1981 HCAPLUS (17) Yeh; US 5230896 1993 ΙT 9003-27-4 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (isobutylene rubber, pressure-sensitive adhesive matrix patches for delivery of salts of drugs) RN 9003-27-4 HCAPLUS 1-Propene, 2-methyl-, homopolymer (9CI) (CA INDEX NAME) CN CM 1 CRN 115-11-7

CMF C4 H8

```
CH<sub>2</sub>
H3C-C-CH3
IT
     98418-47-4, Metoprolol succinate
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (pressure-sensitive adhesive matrix patches for delivery of salts of
        drugs)
RN
     98418-47-4 HCAPLUS
CN
     Butanedioic acid, compd. with 1-[4-(2-methoxyethyl)phenoxy]-3-[(1-
     methylethyl)amino]-2-propanol (1:2) (9CI) (CA INDEX NAME)
     CM
           1
     CRN
          51384-51-1
     CMF
          C15 H25 N O3
                                 CH_2-CH_2-OMe
             OH
i-PrNH-CH2-CH-CH2-
     CM
           2
          110-15-6
     CRN
     CMF
          C4 H6 O4
HO2C-CH2-CH2-CO2H
L14
     ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2002 ACS
ΑN
     1999:468457 HCAPLUS
DN
     131:103285
     Microlayer breathable films of degradable polymers and thermoplastic
ΤI
     elastomers
     Topolkaraev, Vasily; Soerens, Dave A.; Thomas, Oomman P.
IN
PA
SO
     PCT Int. Appl., 63 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM B32B025-08
     ICS B29C047-70
     38-3 (Plastics Fabrication and Uses)
     Section cross-reference(s): 39, 63
FAN.CNT 2
                                              APPLICATION NO.
                                                                 DATE
     PATENT NO.
                       KIND
                              DATE
                              19990708
                                              WO 1998-US27655 19981230
PΙ
     WO 9933651
                        Α1
             AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
              DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
              KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
             MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
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FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,

US 1997-1730

19971231

CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

20000912

Α

US 6117438

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WO 9933655
                       Α1
                            19990708
                                            WO 1998-US27696 19981229
             AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
             KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
             MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
             TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
                     GN, GW, ML, MR, NE, SN, TD, TG
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             DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
             KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
             MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
             TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     AU 9920176
                            19990719
                                            AU 1999-20176
                       Α1
                                                             19981229
                                            AU 1999-20968
     AU 9920968
                       Α1
                            19990719
                                                             19981229
     AU 740500
                       В2
                            20011108
     EP 1037743
                       Α1
                            20000927
                                            EP 1998-965514
                                                             19981229
             DE, FR, GB
     JP 2001526986
                       T2
                            20011225
                                            JP 2000-526368
                                                             19981229
     AU 9919479
                       A1
                            19990719
                                            AU 1999-19479
                                                             19981230
     EP 1044104
                       Α1
                            20001018
                                            EP 1998-964315
                                                             19981230
             DE, FR, GB
     JP 2001526984
                       T2
                            20011225
                                            JP 2000~526363
                                                             19981230
PRAI US 1997-1730
                       Α
                            19971231
     US 1997-2059
                       Α
                            19971231
     US 1998-221084
                       Α
                            19981228
     WO 1998-US27696
                       W
                            19981229
                       W
                            19981229
     WO 1998-US27697
     WO 1998-US27655
                       W
                            19981230
     The title multi-microlayer polymer film comprises a plurality of
AΒ
     coextruded microlayers including an elastomeric layer comprising a
     melt-extrudable, thermoplastic elastomer and a degradable layer comprising
     a melt-extrudable, degradable polymer. Filler materials may be included
     in either the degradable polymer layer or the thermoplastic elastomer
     layer.
             The multi-microlayer films may be formed in a co-extrusion
     process.
ST
     thermoplastic elastomer multi microlayer film; degradable polymer multi
    microlayer film
IT
     Polyesters, uses
     RL: PRP (Properties); TEM (Technical or engineered material use); USES
        (branched, water degradable; microlayer breathable films of degradable
        polymers and thermoplastic elastomers)
IT
     Polyolefin rubber
     RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
        (ethylene-octene, AFFINITY EG 8200; microlayer breathable films of
        degradable polymers and thermoplastic elastomers)
ΙT
    Medical goods
        (incontinence devices, adult; microlayer breathable films of degradable
        polymers and thermoplastic elastomers)
IT
     Diapers
        (microlayer breathable films of degradable polymers and thermoplastic
        elastomers)
IT
     Butyl rubber, uses
     Natural rubber, uses
     Nitrile rubber, uses
     Polyoxyalkylenes, uses
     Silicone rubber, uses
     Thermoplastic rubber
```

Urethane rubber, uses

TΤ

IT

TT

ΙT

· IT

ΙT

ΙT

IT

TΤ

IT

```
RL: PRP (Properties); TEM (Technical or engineered material use); USES
   (microlayer breathable films of degradable polymers and thermoplastic
   elastomers)
Plastic films
   (multi-microlayer; microlayer breathable films of degradable polymers
   and thermoplastic elastomers)
Polyethers, uses
RL: PRP (Properties); TEM (Technical or engineered material use); USES
(Uses)
   (polyamide-, block; microlayer breathable films of degradable polymers
   and thermoplastic elastomers)
Polyurethanes, uses
RL: PRP (Properties); TEM (Technical or engineered material use); USES
(Uses)
   (polyester-; microlayer breathable films of degradable polymers and
   thermoplastic elastomers)
Polyamides, uses
RL: PRP (Properties); TEM (Technical or engineered material use); USES
   (polyether-, block; microlayer breathable films of degradable polymers
   and thermoplastic elastomers)
Polyolefin rubber
RL: PRP (Properties); TEM (Technical or engineered material use); USES
(Uses)
   (propene; microlayer breathable films of degradable polymers and
   thermoplastic elastomers)
Polyurethanes, uses
RL: PRP (Properties); TEM (Technical or engineered material use); USES
   (water dispersible; microlayer breathable films of degradable polymers
   and thermoplastic elastomers)
9010-85-9
RL: PRP (Properties); TEM (Technical or engineered material use); USES
(Uses)
   (butyl rubber, microlayer breathable films of degradable polymers and
   thermoplastic elastomers)
9002-88-4, Polyethylene
RL: PRP (Properties); TEM (Technical or engineered material use); USES
   (metallocene low d.; microlayer breathable films of degradable polymers
   and thermoplastic elastomers)
9002-89-5, Polyvinylalcohol
                              9003-09-2, Polyvinyl methyl ether
9003-11-6, Ethylene oxide propylene oxide copolymer
                                                      9003-39-8,
                          9004-57-3, Ethyl cellulose
                                                       9004-64-2,
Poly(vinyl pyrrolidone)
                          9004-64-2D, Hydroxypropyl cellulose, methylated
Hydroxypropyl cellulose
                                           9004-67-5, Methylcellulose
9004-65-3, Hydroxypropyl methylcellulose
                                   24938-37-2, Polyethylene adipate
24937-05-1, Polyethylene adipate
                             25248-42-4, Polycaprolactone
                                                              25322-68-3
24980-41-4, Polycaprolactone
25777-14-4, 1,4-Butanediol succinic acid copolymer
                                                    25805-17-8,
                     26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)]
Polyethyloxazoline
                               26221-73-8, DOWLEX NG 3347A
                                                             26247-20-1,
26100-51-6, Poly(lactic acid
Polybutylene succinate 28158-12-5, Polypropylene succinate
60806-62-4, Polypropylene succinate 67423-06-7, Adipic
                                              70800-37-2, Ethylene-octene
acid-1,4-butanediol-succinic acid copolymer
           112143-11-0, Ethylene oxide-lactic acid block copolymer
115786-07-7, 1,4-Butanediol-polyethylene glycol terephthalic acid block
           128171-16-4, Hydroxybutyric acid-hydroxyvaleric acid copolymer
copolymer
230642-27-0, Morthane PS 370-200
RL: PRP (Properties); TEM (Technical or engineered material use); USES
(Uses)
   (microlayer breathable films of degradable polymers and thermoplastic
   elastomers)
9003-18-3
RL: PRP (Properties); TEM (Technical or engineered material use); USES
(Uses)
```

```
(nitrile rubber, microlayer breathable films of degradable polymers and
        thermoplastic elastomers)
              THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
RE
(1) Schrenk, W; US 3576707 A 1971 HCAPLUS
     9010-85-9
ΙT
     RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
        (butyl rubber, microlayer breathable films of degradable polymers and
        thermoplastic elastomers)
     9010-85-9 HCAPLUS
RN
     1,3-Butadiene, 2-methyl-, polymer with 2-methyl-1-propene (9CI)
CN
     CM
          1
     CRN 115-11-7
     CMF C4 H8
    CH<sub>2</sub>
H3C-C-CH3
     CM
          2
     CRN
         78-79-5
     CMF
         C5 H8
    CH<sub>2</sub>
H_3C-C-CH=CH_2
IT
     25777-14-4, 1,4-Butanediol succinic acid copolymer
     28158-12-5, Polypropylene succinate 67423-06-7, Adipic
     acid-1,4-butanediol-succinic acid copolymer
     RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
        (microlayer breathable films of degradable polymers and thermoplastic
        elastomers)
     25777-14-4 HCAPLUS
RN
     Butanedioic acid, polymer with 1,4-butanediol (9CI) (CA INDEX NAME)
CN
     CM
          1
     CRN 110-63-4
     CMF C4 H10 O2
HO-(CH_2)_4-OH
          2
     CM
     CRN
         110-15-6
     CMF C4 H6 O4
```

 ${\tt HO_2C-CH_2-CH_2-CO_2H}$

```
RN
     28158-12-5 HCAPLUS
     Butanedioic acid, polymer with 1,2-propanediol (9CI)
                                                                 (CA INDEX NAME)
CN
     CM
     CRN
          110-15-6
     CMF C4 H6 O4
HO2C-CH2-CH2-CO2H
           2
     CM
     CRN
          57-55-6
         C3 H8 O2
     CMF
     ОН
_{\rm H_3C-CH-CH_2-OH}
RN
     67423-06-7 HCAPLUS
     Hexanedioic acid, polymer with butanedioic acid and 1,4-butanediol (9CI)
CN
     (CA INDEX NAME)
           1
     CM
     CRN
          124-04-9
          C6 H10 O4
     CMF
HO_2C^- (CH<sub>2</sub>)<sub>4</sub> - CO<sub>2</sub>H
     CM
           2
     CRN
          110-63-4
          C4 H10 O2
     CMF
HO-(CH_2)_4-OH
     CM
           3
     CRN
          110-15-6
     CMF
          C4 H6 O4
HO_2C - CH_2 - CH_2 - CO_2H
     ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2002 ACS
L14
     1987:446373 HCAPLUS
ΑN
     107:46373
DN
     Disposable absorbent articles
ΤI
     Berg, Ronald Wayne; Stewart, Robert Lee
IN
     Procter and Gamble Co., USA
PΑ
```

SO

Eur. Pat. Appl., 29 pp.

CODEN: EPXXDW

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DT Patent
LA English
IC ICM A61L015-00
ICS A61F013-18
CC 63-8 (Pharmaceuticals)
```

AB

FAN.	JNT	T													
	PATENT NO.					4D	DATE			API	PLICAT	ION I	NO.	DATE	
PI	ΕP	2021	27		A2	2	1986	1120		EP	1986-	-3037	04	19860	515
	ĒΡ	20213	27		A:	3	1988	0817							
	ΕP	2021	27 .		В:	L	1992	1007							
		R:	ΑT,	BE,	CH,	DE,	FR,	ΙT,	LI,	LU, 1	NL, SE	3			
	FI	8730	9		В		1992	0915		FI	1986-	2008		19860	514
	FI	8730	9		С		1992	1228							
	ΑT	81292	2		E		1992	1015		AT	1986-	-3037	04	19860	515
	DK	1691	37		В:	l	1994	0829		DK	1986-	-2261		19860	515
PRAI	US	1985	-7344	124			1985	0515							
	ΕP	1986	-3037	704			1986	0515							

The invention provides an absorbent article, such as a diaper or incontinence pad, which is suitable for absorbing body fluids while at the same time reducing or preventing diaper rash. Such an absorbent article comprises a liq. impervious backing sheet, a relatively hydrophobic, liq. pervious topsheet, a flexible absorbent core positioned between the backing sheet and the topsheet, and one or more pH control agents suitable for maintaining skin pH at 3.0-5.5 in the presence of urine and feces. The flexible absorbent core comprises both hydrophilic fiber material and particles of water-insol., highly neutralized hydrogel material. Such hydrogel material is considered to be highly neutralized if at least 50% of the acidic functional groups of the hydrogel material are neutralized with salt-forming cations. The particles of the hydrogel material and the pH control agents are non-uniformly distributed in distinct discrete zones within the absorbent article. Such sepn. of hydrogel and pH control agents can be accomplished, for example, by incorporating the pH control agent with the topsheet of the article and not in the hydrogel-contg. absorbent core. Alternatively, both pH control agent and hydrogel may be present in the absorbent core but in sep. and/or distinct layers of the core or in sep. zones of the core as defined by distinct sections of the core surface. By sepg. hydrogel material and pH control agents in this manner, skin pH control to combat diaper rash can be realized without adversely affecting the ability of the highly neutralized hydrogen material to absorb fluids and maintain requisite skin dryness. Thus, a disposable diaper product contg. both a cellulose phosphate pH control agent and particles of a starch-acrylate hydrogel material is prepd. an article comprises an absorbent core positioned between a polyethylene backing sheet and a hydrophobic, liq. pervious nonwoven rayon topsheet. The absorbent core comprises two layers, one of which is an hour-glass-shaped primary core and the other of which is a smaller oval insert placed beneath the primary core. The hour-glass consists of a homogeneous blend of southern soft wood/pine fibers and fibrous phosphorylated cellulose having an ion exchange capacity of 3.5 mequiv/g. The oval insert consists of a homogeneous blend of southern soft wood/pine fibers and particles (250 .mu.) of acrylic acid grafted starch hydrogel. The absorbent core with its two layers is overwrapped with tissue paper. diposable diaper; incontinence pad

IT Diapers

ST

TT

(disposable, irritation-free)

IT Medical goods

(incontinence pads, disposable, irritation-free) 77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid, 87-69-4, Tartaric acid, biological studies biological studies 110-17-8, Fumaric 110-15-6, Succinic acid, biological studies acid, biological studies 110-94-1, Glutaric acid 111-16-0, Pimelic 111-20-6, Sebacic acid, biological studies 123-76-2 123-99-9, Azelaic acid, biological studies 124-04-9, Adipic acid, biological 526-95-4, Gluconic acid 6915-15-7, 505-48-6, Suberic acid 7664-38-2D, Phosphoric acid, acid salts 9004-32-4,

9004-34-6D, Cellulose, oxidized and phosporylated Carboxymethylcellulose 9032-46-6, Sulfoethylcellulose 26099-09-2, Poly(maleic acid) RL: BIOL (Biological study) (as pH control agent, in diapers and incontinence pads) 9086-70-8 26426-80-2, Isobutylene-maleic anhydride copolymer IT RL: BIOL (Biological study) (hydrogel, for diapers and incontinence pads) ΙT 110-15-6, Succinic acid, biological studies RL: BIOL (Biological study) (as pH control agent, in diapers and incontinence pads) RN 110-15-6 HCAPLUS CN Butanedioic acid (9CI) (CA INDEX NAME) $HO_2C-CH_2-CH_2-CO_2H$ 26426-80-2, Isobutylene-maleic anhydride copolymer RL: BIOL (Biological study) (hydrogel, for diapers and incontinence pads) 26426-80-2 HCAPLUS RN 2,5-Furandione, polymer with 2-methyl-1-propene (9CI) (CA INDEX NAME) CN CM 1 115-11-7 CRN CMF C4 H8 CH₂ H3C-C-CH3 2 CM 108-31-6 CRN CMF C4 H2 O3 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2002 ACS L141985:541381 HCAPLUS ΑN DN 103:141381 Estimation of hydrophobicity based on the solvent-accessible surface area ΤI of molecules ΑU Iwase, Kazuhiko; Komatsu, Katsuichiro; Hirono, Shuichi; Nakagawa, Setsuko; Moriguchi, Ikuo Sch. Pharm. Sci., Kitasato Univ., Tokyo, 108, Japan CS Chem. Pharm. Bull. (1985), 33(5), 2114-21 SO CODEN: CPBTAL; ISSN: 0009-2363 DTJournal LA English 22-13 (Physical Organic Chemistry) CC Section cross-reference(s): 1 A novel method of estq. Hansch's hydrophobic const. (log P) by making use AB of the solvent-accessible surface area (SA) with correction for the

hydrophilic effect of any polar moiety (SH) is proposed. The correlation coeff. (r) between obsd. and estd. values of log P was 0.995 with 138 misc. compds. The method can reproduce the differences of log P among

geometrical isomers. Such differences are not calculable by using other

```
available methods. An application of SA and SH to the regression anal. of
     water-soly, data of 156 different org. ligs. gave r = 0.981. The proposed
    method may offer new insight into the physicochem. nature of hydrophobic
     phenomena.
ST
     hydrophobicity solvent accessible surface area
IT
     Solubility
        (of org. mols. in water, solvent-accessible surface area in relation
        to)
ΙT
     Hydrophobicity
        (of org. mols., solvent-accessible surface area in relation to)
ΙT
     Functional groups
        (polar, effect on hydrophobicity)
ΙT
     Surface area
        (solvent-accessible, of org. mols., hydrophobicity in relation to)
IT
               56-23-5, preparation
                                     60-29-7, preparation
                                                             62-53-3,
     preparation
                   64-17-5, properties
                                         64-18-6, properties
                                                                64-19-7
    properties
                  65-85-0, properties
                                        67-56-1, properties
                                                              67-63-0,
    preparation
                   67-66-3, preparation
                                         71-23-8, preparation
                                                                 71-36-3,
                   71-41-0, properties
                                         71-43-2, properties
                                                               71-55-6
    preparation
                           74-83-9, preparation
                                                  74-84-0, properties
     74-82-8, properties
                            74-86-2, preparation
                                                  74-87-3, preparation
     74-85-1, preparation
     74-88-4, preparation
                            74-96-4
                                      74-98-6, properties
                                                            75-00-3
                                                                       75-03-6
                                                            75-34-3
     75-05-8, properties
                           75-09-2, preparation
                                                  75-28-5
                                                                       75-50-3,
                  75-52-5, preparation
                                         78-83-1, preparation
                                                                  78 - 93 - 3,
    preparation
                  79-09-4, preparation
                                         79-16-3
                                                   79-20-9
                                                             79-24-3
                                                                       85-01-8,
    properties
                  86-73-7
                            88-72-2
                                      90-15-3
                                                91-20-3, properties
                                                                       91-66-7
    properties
                            92-87-5
                                      93-55-0
                                                95-47-6, preparation
                                                                        95-48-7,
     92-52-4, preparation
    preparation
                   95-50-1
                             98-82-8
                                       98-86-2, preparation
                                                              98-95-3,
                                                           99-99-0
                                                                      100-25-4
    preparation
                   99-08-1
                             99-35-4
                                       99-65-0
                                                 99-94-5
                            100-47-0, properties
                                                    100-52-7, properties
     100-41-4, preparation
     100-66-3, preparation
                             103-33-3
                                        103-65-1
                                                   103-69-5
                                                              103-84-4
     106-42-3, preparation
                             106-44-5, preparation
                                                     106-46-7
                                                                106-49-0,
                   106-94-5
                              106-97-8, properties
                                                     106-98-9, properties
    preparation
                                                               108-36-1
     107-12-0
               107-21-1, preparation 107-92-6, preparation
                                                    108-44-1, preparation
     108-38-3, preparation
                             108-39-4, preparation
                                                    108-88-3, preparation
     108-46-3, preparation
                             108-86-1, properties
                                                    108-94-1, properties
     108-90-7, preparation
                             108-93-0, properties
     108-95-2, properties
                            109-69-3
                                       109-73-9, preparation
                                                               109-89-7,
    preparation 110-15-6, properties 110-54-3, properties
                                     110-85-0, properties
               110-83-8, properties
                                                              111-27-3
                              111-87-5, preparation 115-10-6 115-11-7
    preparation
                   111-43-3
                                                        120-12-7, properties
     , preparation
                     118-74-1
                                119-61-9, preparation
                                                    121-69-7, preparation
     120-80-9, preparation
                             121-44-8, preparation
     122-39-4, preparation
                             123-51-3
                                        123-99-9, preparation
                                                                124-04-9,
                                          134-32-7
    preparation
                  129-00-0, properties
                                                     135-19-3, preparation
                                                   300-62-9
                                                              392-56-3
     141-78-6, preparation
                             142-84-7
                                        287-92-3
                                                 541-73-1
                                                            583-53-9
                                                                        584-02-1
     462-06-6
                513-85-9
                           529-20-4
                                      541-35-5
                                                 622-80-0
                                                                        628-05-7
                                      620-71-3
                                                             627-19-0
     591-50-4
                591-78-6
                           592-42-7
     52006-62-9
     RL: PRP (Properties)
        (hydrophobicity of, solvent-accessible surface area in relation to)
ΙT
    110-15-6, properties 115-11-7, preparation
     RL: PRP (Properties)
        (hydrophobicity of, solvent-accessible surface area in relation to)
RN
     110-15-6 HCAPLUS
CN
     Butanedioic acid (9CI)
                             (CA INDEX NAME)
HO_2C - CH_2 - CH_2 - CO_2H
RN
     115-11-7 HCAPLUS
CN
     1-Propene, 2-methyl- (9CI) (CA INDEX NAME)
```

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СH<sub>2</sub>
||
H<sub>3</sub>C-С-СH<sub>3</sub>
```

=> d his

L14

(FILE 'HOME' ENTERED AT 14:27:13 ON 06 FEB 2002) SET COST OFF

	FILE	'REGISTRY' ENTERED AT 14:27:33 ON 06 FEB 2002
L1		1 S 115-11-7
L2		1869 S 115-11-7/CRN
L3		1 S SUCCINIC ACID/CN
L4		4777 S 110-15-6/CRN
L5		3 S L2 AND L4
	CTIC	'HCAPLUS' ENTERED AT 14:29:54 ON 06 FEB 2002
L6	FILE	2 S L5
L7		0 S L6 AND (1 OR 62 OR 63)/SC,SX
	FILE	'REGISTRY' ENTERED AT 14:30:21 ON 06 FEB 2002
	FILE	'HCAPLUS' ENTERED AT 14:30:34 ON 06 FEB 2002
L8		136 S L1, L2 AND L3, L4
L9		9 S L8 AND (1 OR 62 OR 63)/SC,SX
L10		1 S L8 AND COSMETIC
L11		1 S L8 AND COSMETICS+NT/CT
L12		9 S L9-L11
L13		2 S L12 AND ?EMULS?
	FILE	'HCAPLUS' ENTERED AT 14:31:47 ON 06 FEB 2002
	ם דדה	HOATEGS ENTERED AT 14.31.47 ON 00 FED 2002

7 S L12 NOT L13